

REQUEST FOR PROPOSAL (R.F.P)

For

Implementation of Open Source Campus Management System (CMS)

Request Number: IIU/CMS/2021/0001



Issued By: International Islamic University, Islamabad

Closing Date & Time: 27 January 2021, 11:00 AM

Tender Document Fee: PKR 2000/-

(In shape of bank draft/pay order along with bid)

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1. PART A: ABOUT THIS REQUEST FOR PROPOSAL

1.1 About IIU

The International Islamic University, Islamabad (IIU) is a well renowned public sector higher educational institution in Pakistan. There are eleven (11) teaching faculties having over 40 departments, five (5) Centres, two (2) academies, two (2) institutes, one (1) college, over seventy (70) schools and one (1) IT Centre. The total number of students in university is around thirty-two thousand including foreign students from over twenty countries. The University has separate male and female campuses.

1.2 Statement of Purpose

The university intends to implement on-premise Open Source (Community Edition) Campus Management System (CMS) for the academic and administrative processes of its male, female campuses and constituent units in an integrative way in order to computerize the whole university processes in a bigger picture.

1.3 Scope of Work

Scope of project includes documentation of existing processes, process re-engineering and implementation of best suited commercially off-the-shelf software to automate the procedures for increased level of effective productivity, efficiency and facilitation to all concerned and stakeholders.

The CMS implementation is believed to have following major components:

- a) Process re-engineering & Preparation of SRS for CMS processes
- b) Implementation of Off the shelf software based on opensource platform along with configuration & customization by domain experts within timeframe agreed in Project Award Agreement.
- c) Sufficient trainings to Technical & Functional users of the system
- d) Technical and functional user manuals
- f) Import of data from existing Student Information System Software (student/faculty records only) for the last at least 20 years

1.4 Objectives

1.4.1 Strategic Benefits

Following are the few significant benefits envisaged and being expected as an outcome of this project implementation:

- a. Operational Automation to eliminate duplicate, redundant and inconsistency procedures and data
- b. Incorporate global best practices and streamline processes for efficiency
- c. Cost effective one-point solution for management
- d. To control and reduce expenses and costs.

University faces increasing demands to compete effectively by upgrading administrative infrastructure to better manage key business processes. Campus Management System will assist to achieve targets well in time and within the defined budget.

1.4.2 Benefits to Management

Administration can reap several benefits from Campus Management System, some of which are:

- a. Effective communication among faculty, staff, parents and students
- b. Centrally stored information repository with zero redundancy
- c. Best possible resource optimization
- d. Availability of microscopic as well as macroscopic views
- e. Delivering accurate, accessible information to stakeholders
- f. Ensuring maximum system availability and reliability
- g. Integrated, streamlined business processes using advanced functionality
- h. Timely reply to external public sector bodies
- i. Generation of reports for onward communication to HEC, AGPR, Ministry of Finance, PPRA and other organizations.

1.5 How to Lodge Proposal

1.5.1 Form and Content

To lodge a valid financial proposal, you must complete and submit the Compliance Documents for Respondents in Parts C, D, E and F.

1.5.2 Language

The Proposal should be filled by the bidders in English language only. If any supporting documents submitted are in any language other than English, translation of the same in English language is to be duly attested by the Bidders. For purposes of interpretation of the documents, the English translation shall govern.

1.5.3 Lodgment Format

You are only able to lodge a proposal in one of the ways listed in this section. While other methods of lodgment are not applicable to this Request for Proposals. Therefore, you must only lodge your proposal in the way listed below:

- a. **Single stage two envelope process** would be followed for this RFP. The Bidders should submit their responses as per the format given in this RFP in the following manner:
 - i. Technical Proposal (1 Original + 1 Copy + 1 USB) in separate envelope. The Technical Proposal **MUST** include separate sealed envelope of Earnest Money instrument (@3% of total financial bid value).
 - ii. Financial Proposal (1 Original + 1 Copy + 1 USB) in separate envelope
- b. The response to Technical Proposal and Financial Proposal (As mentioned in previous paragraph) should be covered in separate sealed envelopes super- scribing "Technical Proposal" and "Financial Proposal" respectively. Each copy of each bid should also be marked as "Original" or "Copy" as the case may be.
- c. A full and complete copy of the technical and financial bid must also be submitted in electronic form/excel stored on a USB. Please submit this electronic copy with the hard copies and ensure that the electronic copy is identical to the hard copies.
- d. The two envelopes containing copies of Technical Proposal and Financial Proposal should be put in another single sealed envelope clearly marked "Response to RFP for CMS Solutions".
- e. The outer envelope thus prepared should also indicate clearly the name, address, telephone number, E-mail ID of the Bidder to enable the Bid to be returned unopened in case it is declared "Late".
- f. Please Note that Prices should not be indicated in the Technical Proposal but should only be present in the Financial Proposal.
- g. All the pages of the proposal must be sequentially numbered and must contain the list of contents with page numbers. Any deficiency in the documentation may result in the rejection of the Bid.
- h. The original proposal/ bid shall be prepared in indelible ink. It shall contain no interlineations or overwriting, except as necessary to correct errors made by the bidder itself. Any such corrections must be initialled by the person (or persons) who sign(s) the proposals.
- i. All pages of the bid shall be initialled by the person or persons who sign the bid.
- j. In case of any discrepancy observed by University in the contents of the submitted original paper bid documents with respective copies, the information furnished on original paper bid document will prevail over others.

- k. Bidder must ensure that the information furnished by him in respective USB is identical to that submitted by him in the original paper bid document. In case of any discrepancy observed by Information Technology Centre in the contents of the USB and original paper bid documents, the information furnished on original paper bid document will prevail over the softcopy.
- l. Respondents may lodge a proposal By Hand or By Post in the relevant box at:

The Deputy Director (P&S)
Room No. 213, 2nd Floor, Admin Block
International Islamic University
Sector H-10, Islamabad
051-9019255

1.5.4 Closing Time

The Closing Date and Time for lodgement of financial bid is as set out on the front page of this Request document. Bids submitted by post must arrive at the locked box not later than the Bid Closing Time.

1.5.5 Late Lodgment

Bids that are not received in full after Bid Closing Date and Time will not be received by the IIUI. The bids submitted by fax/e-mail etc. shall not be considered.

The University shall not be responsible for any postal delay or non-receipt/non-delivery of the documents. No further correspondence on the subject will be entertained.

1.5.6 Proposal Preparation Costs

The bidder shall be responsible for all costs incurred in connection with participation in the RFP process, including, but not limited to, costs incurred in conduct of informative and other diligence activities, participation in meetings/discussions/presentations, preparation of proposal, in providing any additional information required by the University to facilitate the evaluation process, and in negotiating a definitive contract or all such activities related to the bid process.

The University will in no case be responsible or liable for those costs, regardless of the conductor outcome of the bidding process.

1.6 Proposal Evaluation Process

The University will constitute a Bid Evaluation Committee to evaluate the responses of the bidders. This committee shall evaluate the responses to the Request for Proposal, all supporting documents/documentary evidence. Inability to submit requisite supporting documents/documentary evidence, may lead to rejection.

The Bid Evaluation Committee reserves the right to accept or reject any or all proposals on the basis of any deviations. The decision of the Bid Evaluation Committee in the evaluation of responses shall be final. No

correspondence will be entertained outside the process of evaluation with the Committee. The Committee may ask meetings with the Bidders to seek clarifications on their bid.

Each of the responses shall be evaluated as per the criteria and requirements specified in RFP and in the Request for Financial Proposal. To the extent that the University considers appropriate, it may also take into account any other information available to the University regarding the Respondent or the RFP.

Please be aware that bids will be assessed to determine the extent to which it may deliver value for money to the University. All costs, benefits and risks associated with each bid will be assessed when making a value for money decision.

Following are the steps which will be followed for the Selection of successful bidder:

- a. In first stage, only Technical proposals will be opened in the presence of bidder's representatives who choose to attend.
- b. Proposals of the firms shall be evaluated based on its responsiveness to the Term of Reference (TORs)/ Scope of Work and the vendors may be required for discussion during the evaluation.
- c. Based on technical evaluation, the financial proposal of only technically responsive bidders (qualified bidders) will be opened.
- d. For qualifying in Technical responsiveness, bidders must fulfil all the requirements as laid out in Part B, C, D, E, F & G.
- e. If any of the mandatory requirements is not met by the bidder, the bid will be cancelled straightaway and no further consideration will be given.
- f. Financial proposals of bids found technically non-responsive shall be returned un-opened.
- g. The bid found lowest evaluated bid or highest scorer for the cumulative value of both Technical and Financial scores, will be accepted for the award of tender.
- h. For ordering purpose, the price evaluation will be done against complete items of the bid.

The financial/price proposal of all the contractors, will be compared. The overall weight-age factor applied to Technical & Financial scoring will be as under:

Sr. No.	Criteria	Weightage
1	Technical Proposal	70
2	Financial Proposal	30
Total		100

1.7 Technical Bid Evaluation

The evaluation shall be carried out using the documentation provided by the contractor firms, as per the required format given in Parts B, C, D, E, F and G as per following guidelines:

- a. Each modules of CMS shall be responded by contractor firms as 'YES' or 'NO' only.
- b. 'YES' shall imply that the solution for CMS offered for implementation is ready and shall be deployable in due time as mentioned in RFP.
- c. 'NO' means that the module is either not available or still in development/ customization stage and shall not be available for deployment in due time as mentioned in RFP.
- d. In case of receival of any other response, other than the above mentioned, the response shall be considered as NO.
- e. Each module of CMS may have sub-modules/ requirements/ explanations. A module shall be considered responded to be 'YES' only if all its sub-modules/ requirements/ explanations are responded as 'YES'.

Technical criteria for evaluation of CSM shall be based on "Criteria for Qualification" mentioned in section 2.3 and the completeness shall be evaluated based on the percentage of responsiveness to the core modules of CMS.

$TTM = \text{Technical Qualified Marks} * 0.7$ where TTM = Total Technical Marks

1.8 Financial Bid Evaluation

Factors	Max. Marks
Total Financial Marks (TFM)	30

Financial marks of the bidder shall be evaluated using following rubrics:

$TFM = (\text{Lowest Bid Price} / \text{Bidder Price}) * 30$ where TFM = Total Financial Marks

1.9 Combined Final Evaluation

The final evaluation will be based on the respective weightage assigned to Technical Criteria and Financial Criteria and the marks attained.

$GTM = TTM + TFM$, where: GTM= Grand Total Marks

1.10 Award of Contract

Prior to the expiration of the validity period, the University will notify the successful bidder in writing or email, that its proposal has been accepted. University shall enter into a contract, incorporating all clauses, pre-bid clarifications and the proposal of the bidder between the University and the successful bidder.

In case the tendering process / public procurement process has not been completed within the stipulated period, the University may like to request the bidders to extend the validity period of the bid. The notification of award will constitute the formation of the contract.

1.11 Operational Date

For the efficient monitoring and timely implementation of this project, it is anticipated that the software will be operational after ten months of the award of the project.

1.12 Where to Get More Information?

If you have any enquiries about this RFP, please send your query to “addl.dirit@iiu.edu.pk”

2. PART B: COMPLIANCE DOCUMENTS FOR RESPONDENT

This part is to be completed by the Respondent and submitted to the IIUI in accordance with Part A, section 1.3, with the help of “Appendix Bid Templates” where required.

2.1 Mandatory Checklist for Eligibility

Bidders are required to make sure that the following mandatory requirements of eligibility are fulfilled and submitted within the stipulated time period. Non-submission of any one of the following applicable requirements may result in disqualification.

#	Mandatory Eligibility Criteria Checklist	Yes (✓) /No (✗)
1	The bidder should furnish a Certificate/Undertaking on judicial STAMP PAPER worth Rs. 100 for compliance to RFP specification and the acceptance of all the terms and conditions of the RFP unconditionally. Otherwise the tender will not be considered under any circumstances	
2	Proof of GST Registration and Letter of Incorporation from SECP	
3	Original affidavit (not older than one month) on Stamp Paper(s) of worth Rs.100 or more that Bidder is not insolvent, bankrupt and is not blacklisted or debarred by PPRA, Government, Semi-Government, Private, Autonomous body, or any international organization.	
4	Proof of relevant experience which reflects the firm as service provider for CMS/ERP. Proof of successful deployment of CMS/ERP system based on open source platform	
5	Earnest Money equal to 3% of bid price is attached	
6	Audited Financial Reports which reflects the turnover of last 03 years. Appendix Form-1	
7	Undertaking on company letter head for completion of project implementation within stipulated time agreed in Project Award Agreement	
8	Undertaking on company letter head that the bidder is original owner of the solution and owns the code copyright/ownership	

9	Submission of Mandatory RFP documents/Bid templates and ordering according to Form 6 format	
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Note: Bidders are required to submit filled, signed & stamped copy of the above checklist along with the Proposal

2.2 Criteria for Qualification

Interested firms should provide information demonstrating that they have the required qualifications and relevant experience to perform the Services. Qualifications requirements for short listing are:

Sr.	Criteria	Requirements	Marks Distribution	
	COMPANY PROFILE (25)			
1	Financial Turnover Extracts from the audited Balance sheets from the statutory auditor <i>Appendix Form-1</i> (10 marks)	Average Financial Turnover related to software development of last three (3) financial years (as per the last published Balance sheets) This turn over should not comprise of sales revenues related to supply of hardware/IT infrastructure	Equal to or more than 30 million Rupees	10
			Between 30 million &= 25 million Rupees	05
			Between 25 million &= 20 million Rupees	02
2	Professional Staff curriculum Vitae <i>Appendix Form-2</i> (05 marks)	Full-time professional staff engaged in software development and implementation (Number of Software Development Staff) along with relative skilled certification	Equal to or more than 20	05
			Between 15 & 20	03
			Less than 15	01
3	ISO Certification (05 marks)	Provide evidence	ISO 20001, ISO 27001, ISO 9001	05
			ISO 20001, ISO 27001	03
			ISO 9001	01
4	Registered as partner with open source CMS/ERP OEM/Community (05 marks)	Provide evidence from OEM/Community	05	
	RELEVANT PAST EXPERIENCE (25)			
5	Relevant Projects <i>Appendix Form-3</i> (20 marks)	IT services organization/Bidder must have successfully completed at least 3 similar development and implementation contracts in open source Platform in the medium size	Equal to or more than 5 CMS/ERP projects	20
			4 Projects	12

Sr.	Criteria	Requirements	Marks Distribution	
		university. Please provide Good Standing Certificates of projects	3 Projects	04
6	Company Experience (5 marks)	Company relevant experiences in CMS/ERP. Provide evidence from PSEB or relevant document from SECP	Equal to or more than 10	05
			Between 10 & 7	03
			Between 7 & 3	01
METHODOLOGY, IMPLEMENTATION PLAN & ARCHITECTURE (20)				
7	Approach, Methodology Risk Mitigation and Implementation plan 1. Understanding of the objectives of the assignment 2. Completeness and Responsiveness <i>Appendix Form-4 and 4.1</i> (20 marks)	a) The extent to which the consultant's approach respond to the objectives indicated in the RFP b) Project Timelines	Details of methodology and implementation plan	20
			Partially filled methodology and implementation plan	08
			Without methodology & implementation plan of assignment	0
Compliance to IIU Requirements (30)				
8	Compliance to requirements mentioned in RFP (30 marks)	The extent to which the proposal responds exhaustively to all the requirements of all the Scope of Work specially mentioned in the following sections of this RFP. a) General/Technical Requirements (10) b) Student life cycle technical requirements (10) c) Finance, financial aid & workload technical requirements (10) Bidder to present proposed solution to evaluation committee if required	Compliance to requirements 90 % or above	30
			Compliance to requirements between 75-89%	15
			Compliance to requirements below 75%	0

Bidders, whose bids are responsive, based on minimum qualification criteria as in Qualification Criteria and score at least 70 marks would be considered technically qualified.

2.3 Appendix: Bid Templates

The bidders are expected to respond to the RFP using the appropriate forms given in this section along with other supporting documents for qualification.

Form 1: Company & Product Profile Template

Name of Company			
Address of the Company			
Detail of contact person (s) and title (s)		Primary Contact	Secondary Contact
	Name		
	Title		
	Phone #		
	Email		
Year Registration			
Certificates (Attach)	Title of Certificates		
No of Employees			
Latest annual average turnover in millions PKR for past 3 years and attach copy of audited Annual Accounts (of last 3 years)	1st year	2nd year	3rd year
Open Source Platform & Product profile (Attach Documents)			

Form 2: Technical Staff Curriculum Vitae (CV) Template

Name of Employee:		
Position:		
General Information	Name:	Date of Birth:
	Telephone:	
	Email:	
	Years with Present Employer:	

Employment Record:

Summarize over all professional experience in reverse chronological order.

DD/MM/YY		Company/Project/Position/Specific Tech experience
From	To	

Relevant Experience:

Summarize relevant experience in reverse chronological order. Indicate particular technical and managerial experience relevant to the project:

DD/MM/YY		Company/Project/Position/Specific Tech Experience
From	To	

Education:

Highest Level of Degree	University/Year/Degree Title
PhD/MPhil	
Masters	
Bachelors	

List down the Certification with evidence:

Certificate

I, the undersigned, certify that to the best of my knowledge and belief, these data correctly describe me, my qualifications, and my experience.

Date: _____

[Signature of staff member and authorized representative of the firm] Day/Month/Year

Full name of staff member: _____

Full name of authorized representative: _____

Form 3: Relevant Experience Template

Title of Project			
Description			
Contact Details		Focal Person of Bidder	Focal Person of Client Organization
	Name		
	Title		
	Phone #		
	Email		
Project Worth (millions) *			
Project Duration (months) *			
Challenges during Implementation			
Lesson Learned			
Open Source Technology Stack			

*Please attach relevant documents to corroborate your information.

Form 4: Methodology and Implementation plan

Explain the approach to implementation methodology for carrying out the activities and obtaining the expected output, and the degree of detail of such output.

You are suggested to present Approach and Methodology divided into the following sections

- a) Understanding of the project
- b) Potential initiatives given the priorities
- c) Technical Approach and Methodology
- d) Customization Methodology
- e) Integration Methodology
- f) Maintainability methodology

Form 4.1: Proposed Project Plan

In this section you should propose the main activities of the assignment, their content and duration, phasing and interrelations, milestones, and delivery dates of the reports and deliverables.

The proposed work plan should be consistent with the technical approach and methodology, showing understanding of the TOR and ability to translate them into a feasible working plan. A list of the final documents, including reports/manuals to be delivered as final output, should be included here.

The above should be substantiated with the project plan, as per the following template.

CALENDAR MONTHS													
Sr.	Activity	1	2	3	4	5	6	7	8	9	10	11	12
1													
2													
3													
4													
N													

1. Indicate all main activities of the assignment, including delivery of reports.
2. Duration of activities shall be indicated in the form.

Form 5: Affidavit for Power of Attorney

AFFIDAVIT

I, (name) on behalf of (IT Organization/Company/Consortium/Joint Venture), having its registered offices at (Registered Address), do hereby solemnly affirm and declare as follows;

That, I am the Power-of-Attorney holder in the instant matter and therefore am well acquainted with the facts and circumstances involved herein completely and comprehensively.

That, on behalf of the organization mentioned above, also hereby certify that neither I/our Organization/Company/Consortium/Joint Venture have abandoned any work in Pakistan nor any contract awarded to us for such works have been rescinded, during last five years prior to the date of this bid.

That, I hereby authorize(s) and requests any Bank, Person, Firm or Corporation to furnish pertinent information deemed necessary and requested by the directorate to verify the statements/information or regarding my (our) competence and general reputation.

That, it is understood and agreed that further qualifying information may be requested and agrees to furnish any such information at the request of the Directorate/project implementing agency.

That, I certify that all the statements/information furnished in the bid document for the Development and implementation of CMS for International Islamic University, Islamabad are true and correct to the best of my knowledge and matters of record.

And I sign this affidavit on this the ____ day of _____, at _____.

Signature: _____

Name: _____

CNIC: _____

Form 6: Document Submission Format

The interested parties must submit the RFP in the following format.

1. Mandatory eligibility criteria checklist along with required documentation
2. Form 1: Company Profile Template
3. Form 2: Technical Staff Curriculum Vitae (CV) Template
4. Form 3: Relevant Experience Template
5. Form 4: Methodology and Implementation plan
6. Form 5: Affidavit for Power of Attorney

3. PART C: GENERAL/TECHNICAL REQUIREMENTS

The main idea behind the CMS is to automate the student, faculty and staff related whole processes to decrease the workload on the faculty and administration. International development and deployment open standards and practices should be adopted for implementation and development.

Firms should propose their own comprehensive implementation plan and timelines in identify phases in which this whole activity will be completed. The technical proposal should include their implementation plan for the project, including the deliverables for each milestone, such as requirement analysis of existing business processes, design, gap analysis, implementation, deployment, Training, user acceptance, Go-Live, support and sign off.

Firm shall be free to run project activities in parallel, the work shall be divided into following phases.

3.1 Review/bridging the processes

- a) Carrying out an in-depth analysis of existing business processes by two different teams appointed for CMS
- b) Carrying out an in-depth review of the CMS specifications
- c) Assess/review the re-engineered processes and related CMS developments in terms of the used methodology, implemented technology and user acceptance
- d) Provide technical support to the processes/application in the view of the transition to the full CMS implementation

3.2 Design Phase

- a) Plan the business process re-engineering interventions in terms of selected methodology and business process management tool as well as needed process simulations
- b) Mapping (as-is) and re-engineer (to-be) the IIU business processes
- c) Prioritize and schedule the processes/business areas for the CMS interventions for the implementation phase
- d) Design the Integration Architecture and Solutions able to integrate the other applications resident in IIU

3.3 Implementation Phase

- a) Implement the CMS based on open source software technologies
- b) Implement the integration services according to integration architecture
- c) Conduct system demonstration and user acceptance testing and final deployment in IIU premises
- d) Conduct on-the-job training of selected IIU personnel and execute change management plan for successful implementation

- e) Provide the needed support and maintenance of the provided systems along with the necessary changes
- f) Delivery of the full user and technical documentation
- g) Post-production Support for at least one year after final acceptance

The firms should also:

- a) Provide updates of any new release from time to time during the agreed maintenance period.
- b) Should impart training and transfer skills for onward customization and maintenance.
- c) The original source code/SDK of customization made by the firm shall be handed over to the IIU. The IIU shall have complete rights to modify the software as per future needs with the coordination of vendor.
- d) Should run new system in parallel for at least 06 months to ensure the accuracy and user friendliness of the system.
- e) Provide all reasonable facilities and assistance, including access to drawings and production data, shall be furnished to the IIU at no charge for inspection. IIU shall have the right to inspect and/or to test the Software to confirm their conformity to the Contract specifications at no extra cost
- f) Provide online help and user manuals covering all features of the systems.
- g) Submit data migration plan to move master and the most essential data from the legacy software to the newly acquired system. IIU will provide data in CSV format or view based access in coordination with vendor, for data which needs to be migrated in new system. Following data of student life cycle needs to be migrated:
 - Active academic degree granting Programs
 - Personal Data of all active Students.
 - All active courses that active students have studied to date or have transferred credit from
 - Personal Data of Instructors
 - Open and Historic Enrolments of all Active Students
 - Final grades of active students for previous terms will be brought into Student Lifecycle Solution
 - Building and Facilities (classrooms, lecture halls, laboratories etc.)
 - Any other relevant and essential data of student life cycle

Following data of Finance, Financial Aid & Workload Technical Requirements, needs to be migrated:

- Chart of Account

- Active vendor data
- Cash and Bank data
- Inventory and Fixed Assets
- All employee data
- Opening balances and all open documents
- Any other relevant and essential data related to Finance & Administration

3.4 System Customization & Integration

The proposed system should be designed in a way that integration with other third party systems is possible seamlessly. It should be robust enough to handle runtime minor customization and to perform future customization/module/plugin in and maintenance with the minimum effort. The proposed system must:

- Have a provision to introduce custom fields on existing forms for capturing additional information.
- Have a provision to customize existing forms to modify the properties of the controls available on the system.
- Have a provision to introduce new forms and apply workflow on these forms with pre-defined layout and workflow templates and with the option to add custom fields.
- Be able to include custom scripts at form level.
- Have an option to customize reports with the help of filters generated using different data fields of that form.
- Have a provision to enable/disable and show/hide specific system features and modules.
- Manage minor customization via graphical user interface without customizing the existing code and allow users to generate customized form grids and reports by adding or removing data fields via interface.
- Provide APIs to develop routine to exchange data between CMS and other systems
- Provide data import/export facility in CSV and other machine-readable formats to be used in other systems.
- Have smooth integration for third party applications
- Should include user and developer/technical manuals.
- Having support of multilingual (English and Arabic) and multicurrency features. The system should have a provision for end users to store/retrieve data in English and Arabic languages. There must be a provision to change the software interface language from English to Arabic as both of these languages are officially used in IIU and few international faculty members from Usuluddin and Arabic faculties do not know English language at all.

3.5 General Requirements	Status (Yes/No)
3.5.1 The solution allows users with security access to override rules where appropriate	
3.5.2 The solution allows users cohorts to be identified and maintained, e.g. tutorial group, class groups, assignment groups, international students, research students, administrators, faculty, DEO etc.	
3.5.3 The solution supports version control of key data concepts, including, but not limited to, awards, courses, units and organizational units, etc.	
3.5.4 The solution incorporates extensive and powerful data import and export facilities	
3.5.5 The solution incorporates a powerful, extensive and user definable set of data query tools.	
3.5.6 The solution displays information graphically without the need for users to download data to a third-party product e.g. system provides the facility to display charts of active courses by organisational unit, students by mode of study, student types etc. Respondents to detail fully the extent to which the solution meets this requirement.	
3.5.7 The solution provides the infrastructure to allow screen, form and report field names to be changed to suit institution nomenclature	
3.5.8 The solution provides the ability to view transactions for student/employee by term within each module. For example, the user can view all applications for admissions for a student on the Application Summary screen; the user can view all enrolment transactions for a student for a specific term using the Enrolment screen. Similar summary screens are available in Financial Aid, Student Finance, Correspondence, Event participation and to audit specific transactions such as name changes, grade changes, etc.	
3.5.9 The solution delivers very robust Search/Match functionality. Everywhere that a new ID (student/employee ID) can be created (manually, tape load, test score load, transcripts, etc). The solution can be configured to automatically run Search/Match to ensure that the institution is not creating duplicates.	
3.5.10 The solution provides users with the ability to restrict/ encumber/ sanction students/employees so that they are stopped from accessing various functions or receiving certain services, e.g. block on academic transcripts, graduation, viewing exam results, online enrolment, etc.	

3.5.11	The solution records special requirements at a student/employee, course attempt and unit attempt level e.g. Immunisations records etc. This information cannot be stored in free-text notes fields, but fields specifically designed with start and end dates, reference numbers etc.	
3.5.12	The solutions support standard browser cut and paste functionality.	
3.5.13	The solution can be configured to automatically send an email to a student/ employee when a staff member exercises an override, indicating approval or otherwise. The contents of email are user defined and customizable.	
3.6 System Features		
3.6.1 Security/ System Administration		
3.6.1.1	A fundamental requirement is that most if not all security functions can be maintained by the user system administrators without the need for institutional IT support. Respondents are to detail all areas of the solution where IT support is required. Following initial one-time IT-based setup of integration with LDAP, SSO/OAuth (GSuite & Microsoft), registration of digital certificates, on-going security functions are web-based and may be distributed across campuses.	
3.6.1.2	The solution provides varying granularity for data level security. Respondents to explain fully the level of granularity and an overview of how the security system is structured - e.g. roles/groups/menu functions etc. Security should be based around roles that collect users into logical groups. Roles are assigned permission lists, granting access to system objects such as menus, pages, background jobs, reports and row-level security provisions.	
3.6.1.3	The solution ensures that at logon, users are required to enter a unique user ID and a password.	
3.6.1.4	The solution allows for password ageing	
3.6.1.5	The solution enforces password maintenance such as no of attempts allowed.	
3.6.1.6	The solution allows user system administrators users to maintain security at form, report, job level or data field for roles and/or users without the need for IT/DBA support.	
3.6.1.7	The solution provides the facility to link security roles to individual users	
3.6.1.8	The solution allows for the creation of an unlimited number of security roles	

3.6.1.9	The solution allows user system administrators to link menus, forms, reports etc. to security roles	
3.6.1.10	The solution allows user system administrators to link multiple security roles to an individual user	
3.6.1.11	The solution allows roles and/or users to be configured to have restricted update access for specific forms. e.g. User can only update course information for those courses for which the user is responsible.	
3.6.1.12	The solution has the ability to limit data operations (insert, update, delete or query only) assigned to particular roles	
3.6.1.13	The solution allows user system administrators the ability to re-set user passwords	
3.6.1.14	The solution will provide appropriate security to restrict student access to their own details	
3.6.1.15	The solution provides the facility to set up menus and sub-menus for classes of users	
3.6.1.16	The solution allows selected security roles/users to override and/or waive rules e.g. a small number of 'super' users with access to most or all functions.	
3.6.1.17	The solution allows user system administrators to immediately suspend individual user access privileges	
3.6.1.18	The solution has an automatic timeout of connected but inactive users	
3.6.1.19	The system security should be able to prevent users from viewing or changing other user records or certain information contained in their own record.	
3.6.2 Ease of Use		
3.6.2.1	Shortcut navigation is provided via navigational collection portlets, favourites and hyperlinks.	
3.6.2.2	The solution carries forward context values (at least student/employee ID, course code, citizenship, gender, title) from one form to the next. Within a given page, basic context values are carried through on the top of all of the tabs (Student/employee Name and ID and other relevant context values). In addition, Student/employee ID and other data items appear in context for search when moving between screens.	
3.6.2.3	The solution provides the facility to display multiple student/employee indicators, displayed along with student/employee personal details: a. the indicators are user definable b. the logic behind the indicators is user definable	

c.	indicators are linked to security role/s	
3.6.2.4	examples of student/employee indicators include but not limited to: international student lamp, graduate lamp, graduand lamp, potential graduand lamp, sanctioned lamp, sponsored, non-English speaking background, nationality, students under 18, articulating students, students at academic risk based on GPA etc. These may be displayed with a combination of service indicators and student attributes.	
3.6.2.5	The solution allows users to create list of favorites of forms and reports	
3.6.2.6	Ability to move directly from one form to another without the requirement to move up and down menu structures. In particular, the solution provides the ability for a user to create a user-defined list of links to access pages directly.	
3.6.2.7	The solution inserts default values automatically where possible.	
3.6.2.8	Intuitive form navigation across all modules, minimising the need for special training.	
3.6.2.9	The solution has consistent form design across all modules.	
3.6.3 On-line Help		
3.6.3.1	The solution has a comprehensive electronic user manual for processes, configurations etc and can be easily printed or exported	
3.6.3.2	The solution has a context sensitive help on all screens and for all data elements	
3.6.3.3	The solution provides comprehensive on-line technical documentation	
3.6.3.4	The solution provides an on-line tutorial facility for staff	
3.6.4 Workflow		
3.6.4.1	The solution provides an integrated workflow engine enabling user definition and modification of business rules. It should include an inbuilt workflow engine, designed for intra-application workflow and integration with external notification mechanisms. The workflow should be based around the concepts of rules, roles and routings allowing work to be routed to individuals or pools of users, evaluated dynamically.	
3.6.4.2	The workflow routes information and notifications via the institutes email solution using a protocol such as SMTP.	
3.6.4.3	The solution allows workflow to be maintained by business administrators. Normal day-to-day administration of workflow is based on role membership and web-based administration pages. Only structural changes to workflow processes will exceed the scope of business administrators.	

3.6.4.4	The solution provides staff with a list of current workflows/tasks awaiting action.	
3.6.5 Data Integrity		
3.6.5.1	The solution provides for comprehensive data validation at point of entry to the maximum extent possible	
3.6.5.2	Data is cross-validated at point of entry against other data held within the solution to the maximum extent possible, ensuring data integrity at all times	
3.6.5.3	Data is cross-validated at the database level against other data held within the solution to the maximum extent possible, ensuring data integrity at all times	
3.6.5.4	The solution architecture provides for extensive and comprehensive implementation of business rules and constraints within the application logic tier.	
3.6.5.5	The solution provides extensive validation reports for all batch data creation & update processes. Batch reports log their progress to a batch messages area. They may be viewed readily via the browser.	
3.6.5.6	The solution adopts an open format interface that doesn't require proprietary tools	
3.6.5.7	The solution will be able to input data item/objects from other sources efficiently and easily	
3.6.5.8	The solution supports date effective data to the maximum degree possible, thereby enabling the maintenance of comprehensive data history	
3.6.6 Audit		
3.6.6.1	The solution includes a comprehensive audit trail functionality.	
3.6.6.2	The solution provides a history of all on-line transactions especially in the self-service environment	
3.6.7 Batch System		
3.6.7.1	All reports/jobs to be able to be run on-line and in batch;	
3.6.7.2	Ability to run any number of jobs/reports in a single batch request; jobs can be set to run in sequence or in any order.	
3.6.7.3	Ability to send reports via email as an attachment - in user selectable formats e.g. pdf, csv etc.	
3.6.7.4	The solution provides comprehensive and clear run logs including error reports	

4. PART D: STUDENT LIFE CYCLE TECHNICAL REQUIREMENTS

Description	Status (Yes/No)
4.1 Online Admission System	
4.1.1 The solution must be able to allow the prospects to create own account to register as applicant online.	
4.1.2 The solution must allow prospects to fill required information and submit application supporting document online including such as transcript, certification etc.	
4.1.3 There must be a provision to record relationship with IIU such as employee or employee dependent and upload/attach pictures and documents.	
4.1.4 System must provide communication features to allow collaboration/ communication between education institution and prospect.	
4.1.5 Prospect should be able to download and print filled admission application form, fee challan, roll number slip and the offer letter from the portal.	
4.1.6 The solution must be able to allow prospect to provide bank submitted information.	
4.1.7 There must be an interface for administration and academic department to manage student admission processes online.	
4.1.8 The solution must provide the dashboard for personnel of Admission Section and students for self-service support according to their role & permission.	
4.1.9 System should facilitate importing of entry test marks from different sources like excel etc.	
4.1.10 System should provide facility to generate merit lists for UG/PG programs based on dynamic criteria's/rules.	
4.1.11 Manual applications entertainment facility is required in the system so as applicants like late fee confirmations /re-checking of results etc. can also be entertained in the system	
4.1.12 Ability to transfer merit data from online admission application.	
4.1.13 Ability to define discipline/program wise seats for selection.	
4.1.14 Ability to generate discipline/program wise selection lists.	
4.1.15 Solution should have provision to support quota system.	
4.1.16 Total (n) number of selection will be executed until all the seats are occupied in respective programs	

Description	Status (Yes/No)
4.1.17 Provision of dynamic and pre-defined paginated reports as per provided templates	
4.1.18 There must be a provision to launch campaign-based admissions at different or at the same time.	
4.1.19 Facility to make seating arrangements for applicants based on gender, block, faculty, department and program.	
4.2 Academic Structure	
4.2.1 The solution must be able to support multi campuses creation & access setup	
4.2.2 The solution must be able to support unlimited faculties, departments, programs, scheme of studies, intake/batches creation, semester offering	
4.2.3 The solution must be able to support setting of study intake and academic semester with subject auto enrolment	
4.2.4 The solution must be able to configure academic programs on semester, annual and fixed duration basis.	
4.2.5 The solution must be able to support assessment setting as per programme/ intake/ semester/subject	
4.2.6 The solution must be able to support grading scheme setting as per programme/ intake/semester/subject	
4.2.7 The solution must be able to set/announce dates for course start/end, course add/drop, exams, result declaration, convocation etc.	
4.2.8 The solution must be able to support intake/batch to maintain the criteria for degree completion.	
4.2.9 The system must be able to define quota system.	
4.2.10 The solution must be able to configure and support finance and charging policies of fee.	
4.2.11 The solution must be able to maintain payments in multi-currency, multi-year, multi-location, etc.	
4.2.12 The solution must be able to define scholarship programs, donors and criteria for awarding scholarships.	
4.2.13 The solution should manage the users according to role and permission to access can be controlled by campus, faculty, department, section and unit wise etc. for editing and viewing data.	
4.2.14 User account should be global to access other sub and integrated systems like Koha Library System, Time Table, HR, Moodle, etc.	

Description	Status (Yes/No)
4.2.15 The solution must be able to support repeat and re-sit grading scheme setting	
4.2.16 Ability to view contact information for students, employees and alumni on-line	
4.2.17 Support of central course catalogue, course equivalencies, pre & co-requisites.	
4.2.18 Solution must be able to support academic load and degree completion policies.	
4.2.19 Provision to withdraw students from programme/courses.	
4.2.20 Provision to have dashboards for administrators, faculty, HoD, Principal and students etc, on their respective portals.	
4.2.21 Support to integrate active directory for user authentication.	
4.2.22 Ability to create and maintain data about people and organizations, both internal and external to institution	
4.2.23 Ability to store numerous types (home, business, campus, billing, etc.) of contact data (addresses, phones, email)	
4.2.24 Ability to track present, historical and future information of a student via effective date	
4.2.25 Able to maintain data integrity where the entry of duplicate or multiple records is minimized using search/match to define criteria to check if a student record already exist in the system	
4.3 Registration	
4.3.1 The solution must be able to support student Profile creation	
4.3.2 The solution must be able to support RFID based card generation & printing	
4.3.3 The solution must be able to support both manual and auto programmed / course semester registration	
4.3.4 The solution must be able to support termination of current programme and register to new program	
4.3.5 The solution must be able to support to Defer Programme / Course by students	
4.3.6 Extension in Degree Duration. After expiry of maximum degree duration, regularization of degree status	
4.3.7 The Solution keeps track of Clearance for BOF/BASAR	

Description	Status (Yes/No)
4.3.8 The Solution keeps track of Student Exam File for issuance of Transcript and Degree after submission of NOC/Final Clearance form.	
4.3.9 The Solution keeps track of Verification of (Transcripts/Degree) from graduates or employment issued authority.	
4.3.10 The solution must be able to support add and drop subject handling	
4.3.11 The solution must be able to support next semester auto enrolment upon current semester completed.	
4.3.12 The solution must be able to support/allow exceptional scenario, example: Student transfer from program A to B and from B to C and from C back to A.	
4.3.13 The system must be able to apply different checks before joining like the validity of degree duration, enrolment in a single degree program.	
4.3.14 The system must be able to support joining for program offered in faculty/department other than student's parent faculty/department.	
4.3.15 The system must be able to support course exemption for existing student and migrated student from other universities.	
4.3.16 The system must be able to support readmission cases.	
4.3.17 The system must be able to cancel, suspend student admission based on the rule defined in the system such as low GPA, misconduct, non-payment of dues etc.	
4.3.18 The system must be able to manage course equivalency of migrated students.	
4.3.19 The system must be able to close enrolment of student at the completion of study programs.	
4.3.20 The solution must be able to subscribe students to library services via Koha	
4.3.21 The solution must provide the dashboard for personnel of Admission Section and students for self-service support according to their role & permission.	
4.4 Course Structure	
Curriculum	
4.4.1.1 The solution must be supported by version control of curriculum items, the extensive use of user-defined workflows that provide decision points for nominated users, user-defined mandatory fields, user-defined optional fields, user-defined decision rules as workflow on which a curriculum item should progress through the ability to reconfigure the system to support	

Description	Status (Yes/No)
future changes in business processes, automatic e-mail notification to people or groups at user-defined steps in workflows	
4.4.1.2 The solution must hold information on courses, study areas and units as follows: Objectives, entry requirements, career opportunities, description, completion rules, fees and charges	
4.4.1.3 The Curriculum subsystem is used to define information relating to the academic offerings of the University including courses, study areas (majors, minors, etc.), units, classes, their activities (lectures, tutorials, etc.) and their awards. The proposed Solution,	
4.4.1.4 The solution provides quota management functionality including, but not limited to, enrolment quota, reserved places, buffers, dedicated/designated assignment of places, wait listing	
4.4.1.5 The solution stores course, study area and unit information in such a way that can be used to display on the web and be extracted in a format appropriate for preparation of handbooks, brochures and other publications	
4.4.1.6 Maintain details of the structure of all courses (award and non-award), including majors/disciplines and units (prescribed and elective). The proposed Solution,	
4.4.1.7 Defines and maintains the following, but not limited to, rules in a form that can be applied automatically by the appropriate functions within the system for admission and enrolment	
4.4.1.8 Defines offerings of a course version that allows different course structures at different teaching locations	
4.4.1.9 Provides the ability to put in a future start date and only accept commencing students after that date	
4.4.1.10 Provides the ability to put in a future discontinued/expiry date and still accept commencing students into the course version	
4.4.1.11 Allows courses to be linked to one or more awards	
4.4.1.12 Allows students to take alternative exits from a course	
4.4.1.13 Rolls course versions to a future teaching period/academic year	
4.4.1.14 Allows easy grouping of all course that lead to the same award	
4.4.1.15 Maintains private or public comments of each student	
4.4.1.16 Maintains incoming and out-coming communication between the university and the student, i.e. through phone, email, etc.	

Description	Status (Yes/No)
4.4.1.17 Once a record has been created, the activities taken place subsequently for the student including award of any advanced standing (credit transfer), financial assistance, course and programme information,	
4.4.1.18 Depending on the module, advanced search capabilities include Search by: Student ID, Campus ID, Student ID, CNIC, Career, Term, Last Name, First Name, etc. Search also includes a variety of usages to expand	
4.4.1.19 Provision to offer lecture, lab and workshops courses.	
4.4.1.20 Maintain records of changes applied to the courses	
4.4.1.21 Instructor workload management based define rules.	
4.4.1.22 Support of instructor's educational and non-educational assignments as per IIU guidelines	
4.4.1.23 Support Conflict free exam scheduling for regular and repeating/improving students. Solution should support conflict resolution for Invigilators, time, sitting plan, printing exam slips and cross institution	
4.4.1.24 Multiple semesters structure i.e. summer, deferred and extra semester	
4.4.1.25 Ability to integrate with any Time Scheduling System.	
4.4.1.26 Students should NOT be allowed to Enroll above or below the academic load limits defined in IIU Statues	
4.4.1.27 Ability to send push notifications through CMS Portal and Mobile App	
4.4.1.28 Ability to archive/maintain student wise hard copies documents in the system	
4.4.1.29 Provision to view, mark, lock and update attendance by faculty.	
4.4.1.30 Ability to send attendance shortage notification/letters to parents through Email and SMS.	
4.4.1.31 Support to track attendance of hostilities students for messing and residence.	
4.4.1.32 Provision of dynamic and pre-defined paginated reports as per provided templates.	
4.4.1.33 The system must provide the Course Attendance system.	
4.4.1.34 The Solution must provide the course exemption record of a student.	
4.4.1.35 The solution must provide the essential lab resources for each course.	
4.4.1.36 The solution must maintain the Course Folders.	
4.5 Student Record	

Description	Status (Yes/No)
4.5.1.1 Ability to store various information about a person such as relationship, emergency contact, work experience, health information, publications, languages, athletic and extracurricular activities, membership, photos, visa, passport details, education history	
4.5.1.2 Able to maintain multiple types of checklist for a student / organization based on administrative function	
4.5.1.3 Able to automatically trigger a restriction or additional levels of service to the students based on certain criteria such as if a student has outstanding library fines, he is not allowed to view his grades in self service portal.	
4.5.1.4 Records details and outcomes of tests and other qualifications (e.g. English Proficiency Tests, GMAT, GRE Local and International etc.), including scores on individual sub-tests	
4.5.1.5 System must be able to create dynamic surveys and feedback forms on runtime.	
4.5.1.6 Ability to define and store templates for feedback forms to be utilized at later stage.	
4.5.1.7 There must be a provision to enable course and teacher evaluation forms for the students enrolled in that course for a pre-defined period.	
4.5.1.8 Ability to restrict students from other services on non-filling of form.	
4.5.1.9 Provision to record anonymous or trackable feedback.	
4.5.1.10 System must be able to generate fill/non-fill statistics of form at a given time period.	
4.5.1.11 There must be a provision to generate tabular and graphical reports of submitted data.	
4.5.1.12 There must be a provision to export survey data in different formats.	
4.5.1.13 Able to indicate that the academic program/ plan is research eligible. Settings at the academic plan level will override academic program settings	
4.5.1.14 Able to enroll candidates into the research program	
4.5.1.15 Able to indicates that candidates are required to formally notify the University of their intention to submit their theses for examination by lodging a “Notice Of Intention To Submit” form prior to submission	
4.5.1.16 Able to define when communications are sent to the candidate, supervisor, and any other interested parties regarding the imminence of the end of the candidature and the requirement to submit a thesis.	

Description	Status (Yes/No)
4.5.1.17 Able to define minimum and maximum number of examiners that must examine the thesis for the examination to be deemed valid	
4.5.1.18 Able to configure research status codes to be used in Candidate / Thesis Management process (topic, supervisor, consumption, assignment and thesis)	
4.5.1.19 Able to define progression level for each research status	
4.5.1.20 Able to configure and activate (or deactivate) research topic categories and research topics or allow candidates to propose new topics with effective dates	
4.5.1.21 Able to assign research topics to one or more academic program/plan or a combination of both	
4.5.1.22 Able to define how many candidates can apply for admission for the research topic	
4.5.1.23 Able to define assignment requirement for each research topic	
4.5.1.24 Able to view and add attachments to the assignments	
4.5.1.25 Able to define maximum number of candidates the supervisor can be assigned to supervise	
4.5.1.26 Able to create candidates by the following methods:- 4.5.1.27 Application to a research-eligible program/plan 4.5.1.28 Updating an existing admissions application to a research-eligible program/plan 4.5.1.29 Using Quick Admit process Using the Student Program / Plan component to assign a research-eligible program/plan	
4.5.1.30 Able to allow candidates to search for a pre-defined research topic or to propose a new research topic	
4.5.1.31 Able to define the earliest and final date for a candidate to submit their thesis for review and the dates for viva voce.	
4.5.1.32 Able to track and manage the progress of the submission and final approval of the thesis	
4.5.1.33 Able to allow to resubmit thesis and restarts the thesis examination and grading process again	
4.5.1.34 Able to maintain the thesis final result and indicate whether the examination certificate has been approved	
4.5.1.35 Able to maintain recommendations from the evaluation of the thesis	

Description	Status (Yes/No)
4.5.1.36 Able to indicate Embargo type (reason for withholding the thesis from public such as Intellectual property, ethical considerations, national security and Unembargoed)	
4.5.1.37 Able to indicate if the candidate is ready for graduation	
4.5.1.38 Able to indicate whether the archival copy of the thesis has been sent to the University library and provision to create a public repository of abstracts.	
4.5.1.39 Able to share research documents with all the parties involved in the research.	
4.5.1.40 Provide mapping of thesis tracking and management forms into the system.	
4.5.1.41 Provision to create committees, topic and supervisor assignments.	
4.5.1.42 Ability to submit the proposal documents.	
4.5.1.43 Provision to define timelines, manage “to-do” list of activities and six-monthly progress report.	
4.5.1.44 Provision of submission Synopsis thesis defense proposal.	
4.5.1.45 Record approval from GEC committee and supervisor on presented defense proposal.	
4.5.1.46 Thesis Submission, to obtain the defense date by submitting plagiarism report, thesis documents etc.	
4.5.1.47 Record thesis defense presentation marks into the system.	
4.5.1.48 Evaluation from GEC, supervisors.	
4.5.1.49 Allocation of grades into the system based on evaluation by the concerned faculty, HoD and principal etc.	
4.5.1.50 Advisor/supervisor can supervisor to multiple students.	
4.5.1.51 Approval workflow of thesis from different levels (Faculty, HoD, Principal and main office).	
4.5.1.52 Generation of TH-1, 2, 3, 4, 5 and TH-6 forms as per IIU format	
4.5.1.53 Provision of dynamic and pre-defined paginated reports as per provided templates.	
4.5.1.54 Approval process of final year project.	
4.5.1.55 Setup of checklists & activities to be performed during the final year project.	

Description	Status (Yes/No)
4.5.1.56 Auto reminders based on the due checklists. Provision of the status updates in student's portal.	
Outcome Based Education	
At Program level	
4.5.1.57 Definition of program education objectives (PEOs) & its mapping with Mission and Vision of Institute/faculty/Department.	
4.5.1.58 Development of PEOs KPI's and its evaluation through assessment tools such as, but not limited to surveys, interviews, minutes of meeting, formal and informal feedbacks	
4.5.1.59 Reporting on the attainments of all KPI's pertaining to each PEO at yearly frequency	
4.5.1.60 Tracking and recording of corrective measures, implementation and evaluation ensuring the completion of PEO cycle.	
4.5.1.61 Record keeping of all minutes of meetings related to stake holders such as Industrial advisory board, alumni & employers.	
4.5.1.62 Able to design, modify, send, receive and evaluate the surveys to stakeholders, alumni, employers, parents, representative community leaders and others which may be decided later.	
4.5.1.63 Compile all data pertaining to PEOs, their linkages with PLOs and provide summarized as well as detailed reporting as per required formats of accreditation agencies/bodies such as PEC, NTC etc.	
4.5.1.64 Allow work-flow as per defined loop/cycle by the program committee for execution of evaluation, assessment, attainment and corrective action.	
4.5.1.65 Allow designated office holders/committee conveners/faculty members access to update, include, comment and initiate actions (including Continuous Quality Improvements) under assigned jurisdiction.	
At Faculty/Department Level	
4.5.1.66 Definition of Program Learning Outcomes (PLOs) of each program offered by department/faculty	
4.5.1.67 Development of PLOs KPI's and its evaluation through indirect assessment tools such as, but not limited to surveys, interviews, minutes of meeting, formal and informal feedbacks.	

Description	Status (Yes/No)
4.5.1.68 Development of PLOs KPI's and its evaluation through direct assessment tools such as, but not limited to quizzes, assignments, project reports, lab rubrics, Final year project evaluations, midterm exam, end term exam, viva, presentations etc.	
4.5.1.69 Reporting on the attainments of all KPI's pertaining to each PLO at the frequency of each semester for program, cohort/batch & individual student levels.	
4.5.1.70 Tracking and recording of corrective measures, implementation and evaluation ensuring the completion of PLO cycle at program, cohort/batch & individual student levels.	
4.5.1.71 Record keeping of all minutes of meetings related to stake holders such as Departmental Quality Assurance cells, Department Curriculum Review Committee, Review Committee, Industrial liaison office and other working groups & stakeholders.	
4.5.1.72 Able to design, modify, send, receive and evaluate the surveys to stakeholders, alumni, employers, parents, representative community leaders and others which may be decided later.	
4.5.1.73 Compile all data pertaining to PLOs, their linkages with PLOs and provide summarized as well as detailed reporting as per required formats at all levels including students, batch/cohort as well as program level as per accreditation agencies/bodies such as PEC, NTC etc. requirements.	
4.5.1.74 Allow work-flow as per defined loop/cycle by the program committee for execution of evaluation, assessment, attainment and corrective action.	
4.5.1.75 Allow designated office holders/committee conveners/faculty members access to update, include, comment and initiate actions (including Continuous Quality Improvements) under assigned jurisdiction.	
4.5.1.76 Be able to assign corrective actions at students, cohort and program levels such as, but not limited to representation, assignments, projects, counseling, course repetition, short course, internship etc.	
4.5.1.77 Allow for condition/formula base evaluation of PLOs from different course CLOs in direct assessment.	
4.5.1.78 Allow assessment of PLOs attainment by combining direct and indirect assessment, if required.	
4.5.1.79 Keep record of PLOs at all levels (students, batch/cohort & program) with and without CQI (continuous Quality improvement) cycle.	

Description	Status (Yes/No)
4.5.1.80 Mapping of PLOs to all/some/each course(s) of curriculum for direct assessment.	
4.5.1.81 Mapping of specified indirect methods of PLOs assessment.	
4.5.1.82 Ability of revision of assessment, evaluation, attainment and CQI loop/ cycle and/or workflow at any stage.	
For Course Level	
4.5.1.83 Course catalogue with contents, outlines, learning outcomes and mapping with PLO(s)	
4.5.1.84 Mentioning/mapping of each course learning outcome in different domains of knowledge such as cognitive, psychomotor and affective domains with mentioning of action verbs relating bloom's taxonomy	
4.5.1.85 Assigning of level of attainment of each CLO map in its respective knowledge domain.	
4.5.1.86 Mapping of assessments (not limited to quizzes, assignments, mid/end terms, projects, viva, Lab evaluations etc.) with the CLOs.	
4.5.1.87 Recording of each assessment in terms of problem definition and related documentations.	
4.5.1.88 Record keeping of student attendance.	
4.5.1.89 Record keeping of week-wise lesson plan and its coverage with related assessments.	
4.5.1.90 Individual as well as class record keeping for attainment of CLOs and associated PLOs as per the defined mapping and addition rule for more than one CLOs being mapped to PLO.	
4.5.1.91 Report the CLO attainments at the end of each course at individual as well as cohort levels.	
4.5.1.92 Generation of specified course review report.	
4.5.1.93 Allowing workflow for the assignment, evaluation and closing of each course with the record of all assessments, attainments, corrective actions and summary/detailed reports.	
4.5.1.94 Generation of course folder, as per specified format, at the end of each course.	
For Faculty members	
4.5.1.95 Individual faculty portal for course-wise assessment of CLOs and aligned PLOs	

Description	Status (Yes/No)
4.5.1.96 Keep record of assigned courses, including course files, task, reports, corrective actions etc.	
4.5.1.97 To keep records of counselling assignments, assigned student advisories and disciplinary actions.	
4.5.1.98 Own web-page with records of teaching, research, projects and course records.	
4.5.1.99 Faculty portal with access to student records, PLO/CLO histories, reports and other related items as per the granted access such as member/head of ILO, QAC, CRC and/or other committees.	
4.5.1.100 Initiation of workflow for CQI cycles	
4.5.1.101 Use of portal for assignment of tasks by management and keeping of related records, documents and reports etc.	
For Students	
4.5.1.102 Portal along shall keep record of each student relating its CLO & PLO attainments through each course for direct assessment.	
4.5.1.103 Combinational assessment record/history of each student for attainment of CLO/PLO.	
4.5.1.104 Request generation for academic, administrative as well as other career related documents/approvals such as letters of recommendations etc.	
4.5.1.105 Transcript of CLO and PLO attainments.	
4.5.1.106 Progression record through the degree program with record of grades as well as PLO history, CQI steps and assigned/completed corrective actions.	
4.5.1.107 Indirect assessment linkage with entry, exit and internship surveys etc.	
4.6 Gradebook	
4.6.1 Provision to create/update Grade book categories as per IIU policies by administrator/faculty.	
4.6.2 Provision to add and update marks by faculty.	
4.6.3 Provision to track record of add and update Hifz Test Marks.	
4.6.4 Provision to import/export the grade book marks	
4.6.5 Provision to support absolute and relative grades.	
4.6.6 Result submission, locking and approval procedure for all courses.	

Description	Status (Yes/No)
4.6.7 Result submission, locking and approval procedure for repeat and retest students.	
4.6.8 Provision to keep track of paper rechecking and result amendment.	
4.6.9 Provision to withhold grades and transcripts till conclusion of grades by approving authorities.	
4.6.10 Facility to grade quiz, assignment, mid-term exams, final exams, final year project, thesis and research projects.	
4.6.11 Provision to transform incomplete grade automatically after stated time period.	
4.6.12 Support to provide numerous reports as per IIU requirements.	
4.6.13 System should be able to handle grades of repeat courses and impact on transcript.	
4.6.14 Provision to generate provisional semester result before FBS	
4.6.15 Provision to calculate semester GPA, Cumulative GPA and Major Field GPA for students and should be available to respective students on student portal along with mobile app .	
4.6.16 Support student academic standings as per IIU rulings.	
4.6.17 Support honors and awards of IIU on highest GPA and project basis.	
4.6.18 Provision to record disciplinary committee feedback.	
4.6.19 Facility to generate prevention lists based on attendance and payment of dues.	
4.6.20 Facility to issue provisional certificates, degrees, distinction certificates and various others Certificates.	
4.6.21 Supervision of Courses (Directed Studies).Registration of last 02 courses, which are not being offered in regular (for last semester students only)	
4.6.22 D Grade Relaxation for Undergraduate Students. Undergraduate students can retain maximum 2 D/D+ Grade Courses in their Degree	
4.6.23 Replacement of Elective Courses. Students can replace elective courses in their degree program (last semester)	
4.6.24 Provision to support the issuance of academic transcript/detailed marks sheet.	
4.6.25 Provision of dynamic and pre-defined paginated reports as per provided templates.	
4.6.26 Facility to use different templates for transcripts and degrees.	

Description	Status (Yes/No)
4.6.27 Ability to manage transcript and degree serial numbers for original and duplicate along with issuance date.	
4.6.28 Provision to generate date sheet for mid-term and final exams with the ability to assign examiners and invigilators.	
4.6.29 Roll No issuance process and provision to print Roll no slips in bulk.	
4.6.30 Facility to generate seating plans.	
Online Computer Based Test/Exam	
4.6.31 The solution must have support to set up different admission or other on-line exam/ assessment with real time remote surveillance having secure end user consoles.	
4.6.32 The solution must have support to setup questions and question categories for a specific exam and features should be available on mobile app.	
4.6.33 The solution must have a provision to set test name, description, start/end date-time of test availability and maximum test duration.	
4.6.34 Facility to enable test for certain user groups and IP addresses	
4.6.35 Option to configure basic points for correct, wrong and omitted answers and to set minimum points to pass the exam.	
4.6.36 There must be a provision for random selection or ordering options for questions and answers	
4.6.37 Option to add the “no answer” as default alternative answer	
4.6.38 Facility to leave feedback to the test.	
4.6.39 There must be a provision to password protect test.	
4.6.40 The solution must have the facility to repeat the test.	
4.6.41 The system must have a provision to manage large number of candidates in different sessions.	
4.6.42 The system must have a provision for test center management.	
4.6.43 The system must provide real time results with data analytics for applicants and the administrator.	
4.6.44 The system must provide facility to create test schedule covering the test date, test center capacity, test center location, engagement of supervisory staff, student allocation, other resources, etc.	
4.6.45 The proposed system must have the provision to register candidates for a specific exam.	

Description	Status (Yes/No)
4.6.46 The system must provide facility for fee verification, after verification the student is allowed to generate exam admit card based on availability of seats in different venue and time slots.	
4.6.47 The system must conduct exam in a secure environment and should have the capability to resume if session disconnected due to some reason.	
4.6.48 The system must have the provision to share test results immediately via email and website.	
4.7 Class Scheduling	
4.7.1.1 The solution must be able to support and configure auto time table generation using UniTime (Open source solution) with parameter settings.	
4.7.1.2 The system must allow the role based access to UniTime software and should use the resources as defined in proposed system for scheduling in prospective the time table software.	
4.7.1.3 The two way data sync feature should be available both in uniTime and proposed system along with mobile app.	
4.8 Accommodation Management	
4.8.1.1 The solution must be able to Maintain the Hostel and Room description with type, capacity and detail of other items in a room.	
4.8.1.2 System should have a provision to search occupied or vacant seats.	
4.8.1.3 System must be able to allot, re-allot, attachment, interchange and cancel the hostel seats.	
4.8.1.4 Allotment, re-allotment, attachment and interchange of seats must be linked with the enrolment of a student in current semester and with the payment of dues.	
4.8.1.5 The system must allow students to apply online for allotment, re-allotment, attachment, interchange and cancellation.	
4.8.1.6 The system must be able to entertain applications on First Come First Serve or seniority basis.	
4.8.1.7 There must be a provision to enable online applications for specific batches of a degree program at some specific time for a certain hostel.	
4.8.1.8 The system be able to process applications of students separately based on gender, nationality, degree program and batch.	
4.8.1.9 There must be a provision to enable applications for a specific duration for a certain group based on gender, nationality, degree program and batch.	

Description	Status (Yes/No)
4.8.1.10 The system must be able to print hostel cards after verification of necessary requirements like enrollment, address, dues etc.	
4.8.1.11 There must be a provision to enable/disable different rules for applications like minimum credit hours, degree status, degree duration, first allotment, distance range for permanent address etc. based on gender, nationality, degree program and batch.	
4.8.1.12 The system must be able to maintain different fee structure based on seat type, process (allot, re-allot, attach, extend, cancel, late etc), gender, nationality, degree program and batch.	
4.8.1.13 The system must maintain the information of visitors with respect to student and room.	
4.8.1.14 The solution must provide the dashboard for personnel of Hostels and students for self-service support according to their role & permission.	
4.8.1.15 There must be a provision to send SMS or email notifications to students and their emergency contacts based on different events like, re-allotment, interchange, cancellation, violation of timings etc.	
4.8.1.16 The system should be capable of showing occupancy details of all hostels with student identification number, name, session and status of hostel dues.	
4.8.1.17 System should allow the student clearance with respect to vacant date and submission of other related item of the room.	
4.8.1.18 The system must be linked with the Mess facility for both students and employees.	
4.8.1.19 There must be a provision to manage daily menu and its expenditure in the system.	
4.8.1.20 The system should be able to record meal attendance of a student and generate monthly bill accordingly.	
4.8.1.21 There should be a provision to generate mess bill based on attendance or on fixed monthly basis. This provision should be configurable for girls and boys mess separately.	
4.8.1.22 The system must block mess accounts on non-payment of dues.	
4.8.1.23 The system should also be capable of identifying the expenditure on hostel and mess management, utilities, maintenance so that the cost benefit ratio could be determined.	

Description	Status (Yes/No)
4.8.1.24 The system must also be integrated with existing turnstile gates using biometric devices.	
4.9 Calendar Management	
4.9.1.1 Ability to create and maintain data about institutional events and committees	
4.9.1.2 Organizes information about events and committees	
4.9.1.3 Facility to maintain a graphical calendar of events	
4.9.1.4 Ability to define one or more sessions for an event	
4.9.1.5 The solution must record detail about event organizer, event committee, chief guest, speakers, approved budget and advance, expenditure, venues and reserve venues against the event	
4.9.1.6 Provides the ability to define invitee lists using a delivered segmentation tool	
4.9.1.7 The solution can generate guest lists by importing contacts as CSV formatted files	
4.9.1.8 The system allows for the collection and management of registration details and payments	
4.9.1.9 Ability to issue invitation by such channels as, but not restricted to: Direct Mail, email, SMS, web site banners.	
4.9.1.10 The solution allows for the tracking and recording of RSVP's by such methods as, but not restricted to: Post (manual), Face-to-face (manual), email (automated),	
4.9.1.11 Facility to track responses by date, time and response outcome.	
4.9.1.12 The solution provides a repository for templates, documents, brochures, etc.	
4.9.1.13 The solution must be able to manage the registration fee and budget of the event.	
4.9.1.14 The solution must be able to track the funding source and the donation/contribution for the event.	
4.10 Alumni Management & Fund Raising	
4.10.1.1 The proposed solution must be able to convert student to alumni member on degree completion	
4.10.1.2 Facility for alumni to register/renew themselves online on portal and mobile app.	

Description	Status (Yes/No)
4.10.1.3 There must be a provision for alumni member to update existing job information, company, position, salary range and achievements etc.	
4.10.1.4 The system should be able to print cards for verified alumni.	
4.10.1.5 The system should allow posting of announcements and events for Alumni and the members can join in the desired event using this system.	
4.10.1.6 There should be a provision for Alumni to register their companies so that they can search students with respect to their expertise / qualification / projects/Research for internship/Hiring etc.	
4.10.1.7 The system should be able to record contribution given by alumni or other external organizations. There should be multiple categories for contribution like Seminar, Workshop, Lecture, Books etc.	
4.10.1.8 Facility to start fund raising campaigns on portal.	
4.10.1.9 Ability to manage fund raising campaigns goals, initiatives, budget, activities, resources, etc.	
4.10.1.10 The System facilitates the Registration Process for Convocation. After approval of Convocation schedule by the President, and publishing Ad for Convocation, Graduates register themselves for Convocation	
4.10.1.11 The System facilitates to prepare Graduates' Lists. Degree Program-wise lists of graduates are prepared, Academic year-wise (September 1st to August 31st)	
4.10.1.12 The System facilitates for Identification/Finalization of Gold Medalists. Gold Medalists of every program, for each academic year are identified based on Approved Gold Medal Criteria.	
4.10.1.13 The System facilitates to Distinction Holders' List Preparation. Preparation of Distinction Lists based on Approved Rules for Distinction.	
4.10.1.14 The System facilitates for Preparation of Position Holders' Lists based on Approved Criteria	
4.10.1.15 The System facilitates to Issuance & Collection of Gowns/Caps.	
4.10.1.16 The System facilitates to Issue Invitations cards. Registered Graduates are issued Invitation Cards for attending Convocation Ceremony along with Gowns and caps.	
4.10.1.17 The System facilitates to issue Transcripts/Degrees/Certificates to students after convocation Ceremony	
4.11 LMS, Koha Integration & Web RTC base Conferencing	

Description	Status (Yes/No)
4.11.1.1 The system must be fully integrated with the installed open source library management system Koha.	
4.11.1.2 The system must allow the registered students to utilize the resources of library.	
4.11.1.3 The system must maintain a record of library resource utilization.	
4.11.1.4 The system should allow the students entry in library based on RFID.	
4.11.1.5 There should be a provision in system to manage the procurement of periodicals (Journal, newspaper, etc)	
4.11.1.6 The system must be able to manage and procure books in different categories.	
4.11.1.7 The system must be able to record and manage books and other donations received by library.	
4.11.1.8 There should be a provision to manage libraries located in different blocks separately.	
4.11.1.9 Every software of any organization must interact with financial system, so proposed CMS must support integration with university financial system that consolidates the financial impact of the student transactions into the General Ledger for operational reporting and financial analysis. The faculty and staff information in CMS can be integrated with the HR and Procurement Module using integrated system or API.	
4.11.1.10 Integration with Moodle, GoogleClassRoom, Web RTC based video conferencing like equivalent to BigBlueButton/jitsi along with mobile app	
4.11.1.11 The proposed system must be integrated with open source Learning Management System Moodle.	
4.11.1.12 The integration with Moodle should be two way, the courses available in a semester should also be available to students on Moodle.	
4.11.1.13 Students registered in CMS should be facilitated to use relevant sections of their department on Moodle without any need to register separately on Moodle.	
4.11.1.14 The proposed system should provide the facility to run presentation simultaneously on the computer screens of all the participants.	
4.11.1.15 The proposed system should provide the facility of the interactive whiteboard to be called up in a separate window. Participants can write and draw freely on the whiteboard, and the results will be shown to all	

Description	Status (Yes/No)
participants. Everyone can take turns getting active permission to mark the whiteboard.	
4.11.1.16 The proposed system should provide the feature that lets participants surf the Internet as a group.	
4.11.1.17 The proposed system should provide the feature of real-time text-only conversation between two or more people online. The text messages can be supplemented by small icons, smileys, or limited graphics.	
4.11.1.18 The system must be able to allow voice calls to be made directly through the Internet instead of passing signals through traditional telephone lines.	
4.11.1.19 The system must be able to provide Video Conferencing across all the participants	
4.11.1.20 The system must provide the facility to display instructor's computer screen to all of the participants.	
4.11.1.21 The proposed system should provide the facility to share web pages, HTML slide show presentations, online streaming videos, as well as provide links to online documents and the participants to download files from there.	
4.11.1.22 The proposed system should provide the facility to allow presenters and moderators to go for private conversations if needed.	
e-Correspondence and Document management	
4.11.1.23 The proposed solution must be able to provide support for e-Correspondence and Document management of features below:	
4.11.1.24 The proposed solution must provide support for correspondences (Internal, Incoming and Outgoing) and send them electronically and digital signed to users and/or departments/faculties	
4.11.1.25 System should manage to compose documents for correspondence and ability to process existing manual files	
4.11.1.26 Provide online preview of most file formats like PDF and images	
4.11.1.27 The proposed solution must have Private and Shared space for file sharing	
4.11.1.28 The proposed solution must store documents in encrypted format	
4.11.1.29 The proposed solution must provide Delivery and Statistical reports	
4.11.1.30 Discuss on documents, ping people, or create next activities to track activities to do on a document	
4.11.1.31 Upload regular files, or create documents as links (e.g. Google Doc files)	

Description	Status (Yes/No)
4.11.1.32 Assign documents to users, customers/vendors or system documents/forms like invoices and purchase orders	
4.11.1.33 Supported and organize hierarchical folders allows to define workspace having their own set of tags and actions	
4.11.1.34 System should support multiple tags to structure documents per folder	
4.11.1.35 The proposed solution must provide support for dates assignment and tracking like correspondence received, correspondence written, correspondence due, assignment made, assignment due, assignment completed etc	
4.11.1.36 The proposed solution must have support for Reminders and Escalations	
4.11.1.37 Define custom filters, and save the most used ones into favourite filters and share with other users	
4.11.1.38 Ability to scan documents in batches	
4.11.1.39 Split multi-pages PDFs into several documents	
4.11.1.40 Tag, preview, or launch actions on a set of documents at once, to work in batches	
4.11.1.41 Ability to archive or delete documents. As a protection, you have to archive a documents, before deleting it	
4.11.1.42 The proposed solution must provide a flexible way to grant and remove permissions/access rights from users, documents, batches and folder without the need of system administrator	
4.11.1.43 Share folders to offer an access to external users (with or without logins) and allow them to upload new documents	
4.11.1.44 Ability to share a list of documents with staff / vendors to collaborate easily. Set a validity date on shared documents	
4.11.1.45 Allow to create documents by sending an email/SMS. Define rules to set tags and folders automatically according to the email	
4.11.1.46 Ability to define custom workflow and automated actions like on folders and create documents	
4.11.1.47 Ability to lock/unlock a file to warn other users that a specific document is being modified	
4.11.1.48 Ability to create "missing documents" and organize them like documents, to remind people to upload these documents	
4.11.1.49 Ability to implement custom validation process with tags and automated actions	

Description	Status (Yes/No)
4.11.1.50 System should support to sign document and ability to request for electronic Signature	
4.11.1.51 Facility to manage documents on Android and IOS phones	
4.11.1.52 The proposed solution must provide support for version control	
4.11.1.53 The proposed solution must provide support to see the attached documents without need to install any extra software	
4.11.1.54 Provide Realtime reporting with analytical alert	
4.11.1.55 The proposed solution must support Access Logs for Privacy Compliance and audit control	
4.11.1.56 Every software of any organization must interact with financial system, so proposed CMS must support integration with university financial system that consolidates the financial impact of the student transactions into the General Ledger for operational reporting and financial analysis. The faculty and staff information in CMS can be integrated with the HR and Procurement Module using integrated system or API.	

5. PART E: FINANCE, FINANCIAL AID & WORKLOAD TECHNICAL REQUIREMENTS

Description	Status (Yes/ No)
5.1 Financials	
5.1.1 General	
5.1.1.1 Proposed solution should support complete financial management system	
5.1.1.2 The solution must provide support for Approval / sanction / claim received from the Faculties / Departments.	
5.1.1.3 The system must be able to Claim observed and If any objection or discrepancy found then case forwarded to relevant Faculty / Departments to reply the objection.	
5.1.1.4 Funds provision obtained from Budget Section to pay off the claim.	
5.1.1.5 If funds not available in the relevant account, then Financial support / Transfer of funds from other faculty accounts arranged and if funds not arranged then loan arranged from Liability accounts.	
5.1.1.6 If no objection observed, then voucher prepared according to the nature of expenditure.	
5.1.1.7 The solution must able to check withholding tax and General Sales Tax status and calculate taxes amount.	
5.1.1.8 The solution must able to check voucher and authorized for payment by DDO.	
5.1.1.9 The solution must able to claim forwarded to Audit Department through Electronic tracking system for checking and clearance for payment.	
5.1.1.10 If any query raised by Audit Department, the DDO will reply the query.	
5.1.1.11 The solution must have support for preparation of cheque after bill is passed by Audit Department.	
5.1.1.12 Voucher received in Book Keeping Section for proper recording of transaction on Accounting Software.	
5.1.1.13 Receipt / Collection	

Description	Status (Yes/ No)
5.1.1.14 The system should be able to credit advice collected from bank for recording of tuition fee and another fee component	
5.1.1.15 Facility of deposit slips, receipt slip collected for recording of other than tuition fee amounts.	
5.1.1.16 Preparation of credit vouchers of tuition fee and other fee components amount received from Fee collection accounts.	
5.1.1.17 Preparation of credit voucher of collected amount other than tuition fee according to the nature of receipt amount.	
5.1.1.18 Preparation of credit vouchers to account for the collected amount.	
5.1.1.19 Ability to check, verify and authorize the credit voucher by the concerned officer.	
5.1.1.20 Voucher received in Book Keeping section for proper recording of transaction on Accounting Software.	
5.1.2 Financial Reports	
5.1.2.1 Ability to prepare Cash / Bank Book, Ledger, Subsidiaries, Trial Balance and Balance Sheet.	
5.1.2.2 Ability to prepare Utilization Report.	
5.1.2.3 Facility to collect Bank statement from the bank and prepare Bank Reconciliation Statement.	
5.1.3 Payroll	
5.1.3.1 The system must be able to administer and calculate financial data related to employees wage, salary and deductions.	
5.1.3.2 The system must be able compute gross pay, deductions and net pay for each employee for each pay period	
5.1.3.3 The system must be able to prorate salary and allowance payment based on employee hire or resignation.	
5.1.3.4 The system must be able to withhold salary for employee under suspension.	
5.1.3.5 The system must be able to print pay-slip according to group wise, department wise and individual.	
5.1.3.6 The system must be able to provide security control features, edit and validation rules for all input, update and delete transactions.	
5.1.3.7 The system must be able to audit trails for all critical changes of payroll transaction.	

Description	Status (Yes/ No)
5.1.3.8 The system must be able to track history of all payroll transaction shall be available on-line for predetermined number of years.	
5.1.3.9 There must be provision of standard and user-defined reports shall be generated for management reporting.	
5.1.3.10 The system must be able to generate all kind of vouchers related to salaries.	
5.1.3.11 The system must be able to maintain all types of leave records i.e LFP, LHP and EOL.	
5.1.3.12 The system must be able to cost reports according to the Journal Voucher wise, Department wise and Cheque wise.	
5.1.3.13 There must be provision of online report generation capabilities based on a variety of user-defined criteria shall be available for authorized user on periodic or adhoc basis.	
5.1.3.14 There must be provision of exceptional reports shall also be available to check for discrepancies or inconsistencies.	
5.1.3.15 The system must be able to allow for electronic reconciliation of all control account found in payroll in general ledger system.	
5.1.3.16 The system must be able to prepare payroll and bank transfer statement to be accompanied by a check list.	
5.1.3.17 The system must be able to capture loan information.	
5.1.3.18 The system must be able to deduct monthly instalment in payroll.	
5.1.3.19 The system must be able to monitor loan balances and can be inquired online.	
5.1.3.20 The system must be able to generate report on loan deduction, balance.	
5.1.3.21 The system must be able to track statutory tax requirements and produce employee tax statements on demand in the required format.	
5.1.4 Allowances	
5.1.4.1 The system must be able to provide for user defined coded tables to maintain an unlimited number of allowances with facilities to add, edit and delete of the allowances table.	
5.1.4.2 The system must be able to have control to ensure allowances are only paid to the eligible employees.	

Description	Status (Yes/ No)
5.1.4.3 The system must be able to have the facility to define the maximum amount to be paid to employees based on employee category.	
5.1.4.4 The system must be able to identify allowances that attract income tax.	
5.1.4.5 The system must be able to provide a facility for automatic retrospective adjustments for any allowance rate variation.	
5.1.4.6 The system must be able to provide on-line inquiry and report facilities to list all allowances for an employee.	
5.1.5 Deduction	
5.1.5.1 The system must be able to provide for user defined coded tables to maintain an unlimited number of deductions with facilities to add, edit and delete of the deduction table.	
5.1.5.2 The system must be able to have a facility to override deductions on a priority basis and shall comply with employment act requirements for allowable deductions to be made for a month.	
5.1.5.3 The system must be able to provide on-line query and report facilities to list all deductions for an employee and the outstanding balances.	
5.1.6 Income Tax	
5.1.6.1 The system must be able to allow for deductions to be made in accordance with the Standard Tax Deductions and shall be flexible to accommodate any tax structure changes as directed by the Inland Revenue Department.	
5.1.6.2 The system must be able to store all tax records for employees and these shall be available on-line for query display or report purposes.	
5.1.6.3 The system must be able to generate all necessary tax forms at monthly, yearly and on ad-hoc basis.	
5.1.7 Private Insurance	
5.1.7.1 The system must be able to provide employees with company-based insurance schemes	
5.1.7.2 The system must be able to allow IIUI to implement these insurance schemes according to organizations specifications.	

Description	Status (Yes/ No)
5.1.8 Gross Up	
5.1.8.1 The system must be able to cater for the payroll processing of employees whose contracts are negotiated in terms of net income; system have to provides a gross up function to gross up the employee's net in.	
5.1.8.2 Facility to come in order to facilities tax calculation	
5.1.9 Fund Allocation / Availability	
5.1.9.1 There must be a provision of reservation of amount for a particular purpose.	
5.1.9.2 The solution must be able to store receipt of case from dairy.	
5.1.9.3 The solution must be able to perform scanning of file for demand.	
5.1.9.4 The solution must be able to store discussion with director (Finance).	
5.1.9.5 There must be a provision to check for Fund head.	
5.1.9.6 There must be a provision to check if fund head available, allocate funds.	
5.1.9.7 There must be a provision to check if fund head not available, allocate from other head.	
5.1.9.8 There must be a provision to check if funds not available, specify No funds.	
5.1.9.9 The solution must be able to perform scanning of case for demand.	
5.1.9.10 The solution must be able to perform reservation / lock of amount.	
5.1.9.11 The solution must be able to manage House Building Advances in following ways: a) Application b) House Building & Advances Balance c) Voucher Processing d) Voucher Posting e) Voucher Checking f) Bank Reconciliation g) Book keeping	

Description	Status (Yes/ No)
h) Checking / Authorization/ Rectify i) Voucher Approved	
5.1.9.12 The solution must be able to manage Zakat Fund in following ways: a) Application b) Zakat Fund Balance c) Voucher Processing d) Voucher Posting e) Voucher Checking f) Bank Reconciliation g) Book keeping h) Checking / Authorization/ Rectify i) Voucher Approved	
5.1.9.13 The solution must be able to manage Benevolent Fund in following ways: a) Application b) Benevolent Fund Balance c) Voucher Processing d) Voucher Posting e) Voucher Checking f) Bank Reconciliation g) Book keeping h) Checking / Authorization/ Rectify i) Voucher Approved	
5.1.9.14 The solution must be able to manage General Provident Fund in following ways: a) Application b) General Provident Fund Balance c) Voucher Processing d) Voucher Posting e) Voucher Checking f) Bank Reconciliation	

Description	Status (Yes/ No)
g) Book keeping h) Checking / Authorization/ Rectify i) Voucher Approved	
5.1.9.15 The solution must be able to manage Pension Fund in following ways: a) Submitted from every Month b) Pensioner claim enterer in Pension Register c) Pensioner Payment Voucher d) Payment Voucher Checking / Authorization/ Rectify e) Voucher Approval f) Audit Verification g) Voucher Posting h) Book keeping i) Reconciliation	
5.1.9.16 The solution must be able to manage Contributing Fund in following ways: a) Application b) Contributing Fund Balance c) Voucher Processing d) Voucher Posting e) Voucher Checking f) Bank Reconciliation g) Book keeping h) Checking / Authorization/ Rectify i) Voucher Approved	
5.1.9.17 The solution must be able to manage Welfare Fund in following ways: a) Application b) Welfare Fund Balance c) Voucher Processing d) Voucher Posting e) Voucher Checking	

Description	Status (Yes/ No)
f) Bank Reconciliation g) Book keeping h) Checking / Authorization/ Rectify i) Voucher Approved	
5.1.9.18 The solution must be able to manage Motor Car / Motorcycle Advances in following ways: a) Application b) Motor Car / Motorcycle Advances c) Voucher Processing d) Voucher Posting e) Voucher Checking f) Bank Reconciliation g) Book Keeping h) Checking / Authorization/ Rectify i) Voucher Approved	
5.2 Student Finance	
5.2.1.1 The solution must be able to support and perform collection by various user defined Mode of Payment	
5.2.1.2 The solution must be able to configure and generate fee collection by different mode based on block and credit hours.	
5.2.1.3 The solution must be able to support discount and discount reversal.	
5.2.1.4 The solution must be able to support special bank draft handling for currently differences, bank charges, bounced draft and etc.	
5.2.1.5 The solution must be able to support fee refund processes with policies.	
5.2.1.6 The solution must be able to support miscellaneous invoice for any item/invoice to be charge, at any time.	
5.2.1.7 The solution must be able to support and assign Installment with flexible period and numbers allowed.	
5.2.1.8 The solution must support adjustment of advances.	
5.2.1.9 The system must support waivers, fine and penalties on late payments.	

Description	Status (Yes/ No)
5.2.1.10 The system must be able to support fee exemption for employees and different schemes.	
5.2.1.11 The solution must be able to support statements auto deliver and display in student and parent's portal.	
5.2.1.12 The solution must be able to provide different statistics and analytics in student financial dashboard for university executives.	
5.2.1.13 The system must be able to support scholarship cases based on policies for need base scholarship quota, CGPA merit system etc.	
5.2.1.14 The solution must be able to support Clearance process for issuance of transcript/degree.	
5.2.1.15 The system must provide support to import bank scroll in system for fee collection and verification and provide APIs for real time synchronization with banks like HBL & ABL or any other.	
5.2.1.16 The solution must provide the dashboard for personnel of Fee Section and students for self-service support according to their role & permission.	
5.2.1.17 Able to recalculate fees if the students add or drop classes.	
5.2.1.18 Able to setup refund approval workflow based on the refund amount	
5.2.1.19 The system should allow for de-registering students from courses that have been refunded or the tuition fee being deferred for a specified period and calculate the amount of refund due.	
5.3 Financial Aid	
5.3.1.1 The solution must be able to define different scholarship and Financial Assistance programs.	
5.3.1.2 The solution must be able to record the total budget and grant available for a specific scholarship.	
5.3.1.3 The solution must be able to limit scholarship to specific faculties/ department/ programs/batches.	
5.3.1.4 The solution must be able to define criteria for short listing of applicants for each scholarship program.	
5.3.1.5 The system must be able to accept online applications along with required documents based on the criteria defined.	

Description	Status (Yes/ No)
5.3.1.6 The system must provide a separate dashboard for the short listing of applicants.	
5.3.1.7 The system must be able to enter interview marks and feedback of committee for the applicants.	
5.3.1.8 To generate merit lists and then notify success applicants via email and SMS.	
5.3.1.9 The system must support the payment of scholarship or adjustment of the scholarship against the already paid fee by the student.	
5.3.1.10 The system must be synchronized with bank.	
5.3.1.11 The system must be able to generate invoices in the system to release funds from the donor.	
5.3.1.12 The system must be able to generate the scholarship grant utilization report from the accounting system.	
5.3.1.13 Ability to Calculate Income tax as per defined criteria.	
5.3.1.14 Generation of income tax certificates.	
5.3.1.15 Ability to review fee calculation before and after final posting.	
5.3.1.16 Support to integrate with third party applications like banks for fee receiving	
5.3.1.17 Ability to setup rule base process defined by the IIU	
5.3.1.18 Provision to define donor, scholarships, wavier and award scholarships to the students in accordance with IIU rules and regulations	
5.3.1.19 Manage multiple scholarships for a single student	
5.3.1.20 Support to reverse or halt scholarship based on defined rules	
5.3.1.21 Provision of dynamic and pre-defined paginated reports as per provided templates.	
5.4 HR/ Workload Management	
Organization Structure	

Description	Status (Yes/ No)
5.4.1.1 System should capture manpower charts according to the approved organization chart and the employee data currently placed on position.	
5.4.1.2 The system should be able to define and configure the reporting channels, hierarchies, organization (divisions, departments, regions).	
5.4.1.3 The system should be able to define rules, policies and procedures for individual and multiple posts (Permanent/ Adhoc/ Contract/ Daily-Wages posts etc.).	
5.4.1.4 The system should provide facility to create, edit and eliminate post(s).	
5.4.1.5 The system should facilitate configuration of more than one reporting and approval channel.	
5.4.1.6 The system should provide definitions of functions, purpose and responsibilities associated with the posts.	
5.4.1.7 The system should have the facility to modify job description subject to authorization.	
5.4.1.8 The system should have the facility to maintain history of job descriptions.	
5.4.1.9 The system should have the facility to inform concerned managers of changes in job description via e-mail or memo.	
5.4.1.10 The system should have the facility to link Job descriptions to the manpower charts and to indicate, on the actual charts, which positions in the charts have job descriptions.	
5.4.1.11 The system should provide position status information like Vacant, Active for employment	
5.4.1.12 The system should provide Summary Statistics and user defined reports of Department, e.g. Number of approved positions / grades, Filled/ Vacant, Different types of breakdown, Qualification analysis, etc.	
5.4.1.13 The system should be able to automatically update the organization chart as soon as the employee status changes to show the position as vacant from the start date of deputation, study leave or separation from service by any mean.	

Description	Status (Yes/ No)
5.4.1.14 The System should provide portal page lets that allow easy access to key data from Human Resource Management applications. Each individual business user should be able to personalize the content for their page lets easily.	
Manpower Budgeting	
5.4.1.15 The system should have the facility to allocate budgeted positions for a period with start and end date. A position could be in budget for next year and it also could be for specific time period. This facility should be available based on authority given.	
5.4.1.16 The system should calculate Budgeted vs. Actual Headcount and Budget vs. Actual Payroll.	
5.4.1.17 The system should be able to provide monthly status of budgets and actual.	
5.4.1.18 The system should be able to provide a review of positions approved, recruited and still to be recruited.	
5.4.1.19 The system should be able to flag deviations in budgeted headcount.	
5.4.1.20 The system should have the facility to forecast the Manpower and costing indicators in the sense of working out the cost impact of proposed future manpower budgets. Actual cost for existing staff and estimated cost for additional staff.	
5.4.1.21 The system should be able to provide information to recruitment module on budgeted positions and associated values. Auto updating from recruitment module when position is filled.	
5.4.1.22 The system should be able to define the budgets for the post and their integration with sub-system of budgeting and financials.	
5.4.1.23 System must have the capability such that senior management can analyse salary budget information for their respective department.	
5.4.1.24 System must have the functionality of applying salary increases across the departments easily.	
5.4.1.25 System can easily plan compensation, overtime, taxes and benefits budget prior to the actual release.	
5.4.1.26 User must be able to access current and prior year payroll data in the budget planning.	

Description	Status (Yes/ No)
5.4.1.27 System must have the budget reports so that budget vs Actual can be compared along with the variance comparisons.	
5.4.1.28 Approval for manpower planning is required for blocking additional headcount and controlling the manpower.	
5.4.1.29 Rate changes and increases should be effective-dated for payroll processing.	
5.4.1.30 Managers should have the ability to plan for compensation, overtime, taxes and benefits.	
5.4.1.31 System must have the functionality of applying salary increases across the departments easily.	
Succession Plan	
5.4.1.32 The system should able to keep list of positions that need succession planning.	
5.4.1.33 The system should able to match job profile & person specifications.	
5.4.1.34 The system should able to identify employees (Shortlist).	
5.4.1.35 The system should able to match job profile with employee profile.	
5.4.1.36 The system should recommend trainings for identified employees (Gap Analysis).	
5.4.1.37 The system should have a provision to accept Employment Requisitions from departmental heads.	
5.4.1.38 There should be a provision to retrieve the job description from the organization Chart to attach to the ER through the system.	
5.4.1.39 System should support single/multiple levels of approval of the ER.	
5.4.1.40 The system should ensure that the requisitioned post in ER is within the approved budget.	
5.4.1.41 The system should provide the manager concerned to be able to review the job description for the vacant position to ensure that the functions, responsibilities and the minimum educational and experience requirements are currently valid.	
5.4.1.42 System should maintain interview question templates for each job.	
5.4.1.43 System should provide hiring and on boarding checklist to facilitate the hiring process.	

Description	Status (Yes/ No)
5.4.1.44 Administer recruitment initiatives, such as web advertisements, web applications and screening, developments, applicants and applications, and correspondence with candidates.	
5.4.1.45 Employee list should be generated according to various criteria.	
Job Placement	
5.4.1.46 The system should provide an interface to Internet and internal electronic mail/intranet system to advertise for the vacant positions.	
5.4.1.47 There should be a provision to share the approved job advertisement with other stake holders for publishing in newspaper and website.	
5.4.1.48 System must be able to record and manage the expense incurred on the advertisement of vacant vacancies.	
5.4.1.49 The system should have the facility for maintenance of data on recruitment and advertising agents.	
5.4.1.50 The system should accept resumes/ applications for the advertised jobs online.	
5.4.1.51 The candidates should be able to deposit fee online from anywhere in Pakistan through specified banks.	
5.4.1.52 The system must be able to verify job application fee in real time with the payment processors.	
5.4.1.53 Ability to publish jobs on job portal.	
5.4.1.54 Ability to maintain resume bank.	
5.4.1.55 System should have a requisition library of job templates that can be utilized when creating requisitions.	
5.4.1.56 System should allow administrators to customize text on the e-mail messages (including confirmation acknowledgement and job filled) to external and internal applicants/candidates.	
5.4.1.57 System should allow users to e-mail potential interview times, applications, corporate material, and job opening status.	
5.4.1.58 System should provide a library of standard communication correspondence for printing and distribution.	
5.4.1.59 System should allow administrators to schedule interviews, notify interviewers of times, locations and topics to cover.	

Description	Status (Yes/ No)
5.4.1.60 Ability to distinguish applicant/candidate status for internal or external candidates.	
5.4.1.61 System should maintain history that consists of one candidate record with all the associated recruiting activity regardless of the number of requisitions.	
5.4.1.62 Ability to store resumes for future use by category, job title, skill, or other user-defined attributes.	
5.4.1.63 System should allow applicants/candidates to modify or replace their existing resume.	
5.4.1.64 System should support search of applicants/candidates based on a variety of criteria (e.g., location, skills, prior employers, zip code, and metropolitan areas).	
Candidate Tracking & Selection	
5.4.1.65 System should assist in online tracking/monitoring of applicants through each stage of the recruitment cycle.	
5.4.1.66 The system should have the facility to store and index applications received online through the system, through e-mail or otherwise.	
5.4.1.67 The system should have the query facility to search for one or more applicants and then drill down into their detailed resume information.	
5.4.1.68 The recruitment data bank should hold individual applicants' resumes containing personal details, competencies, previous work experience and academic attainments. It should be possible to identify the source of the application.	
5.4.1.69 The system should allow flexibility in retrieval of information from the data bank, for example by name, competencies, designation etc.	
5.4.1.70 There should be a provision to share the submitted documents with the concern department for initial screening.	
5.4.1.71 The system should have a provision to reverify the job applications by another department like Quality Enhancement Cell etc.	
5.4.1.72 There must be a provision to share the applicant documents with the external evaluators (subject experts) and record their feedback.	
5.4.1.73 System should be able to constitute committees for the selection/shortlisting of candidates.	

Description	Status (Yes/ No)
5.4.1.74 There must be a provision to attach reports/minutes of the meeting with the candidates and advertisements.	
5.4.1.75 The system should have the ability to define a short-listing criteria (ion)) based on some defined parameters.	
5.4.1.76 The system should create hard copy call letters or send e-mails to short-listed candidates or to unsuccessful candidates.	
5.4.1.77 The system should create test and interview schedules.	
5.4.1.78 The system should record scores for recruitment tests.	
5.4.1.79 The system should record interview results with detailed comments.	
5.4.1.80 The system should have the ability to propose/establish a suitable salary offer for selected candidate based on proposed grade, position, qualification, experience, department rules and the details of interview report.	
5.4.1.81 The system should provide multilayer workflow approvals for recruitment.	
5.4.1.82 The system should be able to create an offer letter for the successful applicant.	
5.4.1.83 The system should be able to maintain the employment reference checks addressed to the candidate's current and previous employers.	
5.4.1.84 The system should maintain an easily available history file of unsuccessful candidates; this would help in deciding whether the candidate should be considered or not considered for a similar position arising in the future depending on the reasons (e.g. medically unfit, decline the offer, security disapproval).	
Pre-Placement	
5.4.1.85 The system should maintain medical examination results.	
5.4.1.86 The system should maintain the record of the degrees/qualifications of the candidates attested by the HEC.	
5.4.1.87 The system should record details of the negotiation process with a selected candidate.	

Description	Status (Yes/ No)
5.4.1.88 Hiring managers and recruiters should be able to review pre-screened applicant/candidate.	
5.4.1.89 Hiring managers and recruiters should be able to track applicant/candidate status.	
5.4.1.90 Hiring managers and recruiters should be able to schedule interviews.	
5.4.1.91 Hiring managers and recruiters should be able to communicate with applicants/candidates via e-mail.	
5.4.1.92 Hiring managers and recruiters should be able to view communication history.	
5.4.1.93 Hiring managers and recruiters should be able to report on communications.	
5.4.1.94 The system should have a checklist for all the necessary documents required from a successful candidate.	
5.4.1.95 The system should generate alert if the necessary documents required from a successful candidate have not been received and entered in the system.	
5.4.1.96 System must be able to print Offer letters and intimate via email to successful candidates.	
5.4.1.97 System must be able to record and notify the joining of an employee.	
5.4.1.98 System must be able to generate seniority lists of employee based on joining date, age and other various parameters.	
5.4.1.99 System should be able to generate and assign employee ID number to the successful applicant.	
5.4.1.100 System must be able to depute the new hire in one of the departments of university.	
5.4.1.101 System must be able to transfer an employee in another department.	
5.4.1.102 System must have a provision to receive transfer proposals from sectional heads.	
5.4.1.103 System must be able to manage the relieving of an employee in its current department.	
5.4.1.104 Confirmation in Service	

Description	Status (Yes/ No)
5.4.1.105 System should provide facility for creation of checklist to be filled by departmental heads for employee confirmation in service after completion of probation period.	
5.4.1.106 System should allow extension in probationary period, if required.	
Performance Management	
5.4.1.107 System should be able to define and store a set of KPI / Objectives for each individual.	
5.4.1.108 System should support periodic evaluations. The results of periodic evaluation must be stored in such a way that reports can be generated in a variety of ways showing the development of individuals and in summary form of any grouping of employees.	
5.4.1.109 System should be able to store recommendations for promotion and merit based salary increments.	
5.4.1.110 Skills Management & Training module should be interlinked with the Performance Management/Appraisal module, to identify training needs and to perform Training Needs Analysis (TNA).	
5.4.1.111 The system should be able to perform completion of appraisal forms on-line or printing of hard copies.	
5.4.1.112 The system should be able to prompt when particular appraisals are required for employees.	
5.4.1.113 The system should provide correct routing of forms through the workflow.	
5.4.1.114 The system should keep all the appraisals for an individual and allow for easy retrieval of historical data.	
5.4.1.115 Ability to manage worker competencies to identify and effectively deploy the right people for the right tasks.	
5.4.1.116 Ability to review performance levels through discussions, and then outline steps for improvement by creating and implementing goals for workers.	
5.4.1.117 System should allow users to set up, deliver, and analyse training courses that include agendas, sessions, and tracks, together with demographic information about participants.	
5.4.1.118 System should enable administrators to assign different review forms for different employees within the same review cycle.	

Description	Status (Yes/ No)
5.4.1.119 Ability to track performance review status and dates (e.g., complete, incomplete).	
5.4.1.120 There must be a provision to intimate the concerned employee and various other stakeholders upon receiving the below average evaluation/ACR.	
5.4.1.121 System must be able to track the feedback of employee and committee for the adverse evaluations.	
5.4.1.122 There must be a provision for expunction of adverse evaluations with the approval of authorities.	
5.4.1.123 System must be able to promote, demote, terminate and suspend employees.	
5.4.1.124 System must be able to manage the promotions of Ex-Cadre employees separately.	
Employee Service /Personnel Administration	
5.4.1.125 In the system, the employee Profile Actions include: a. Basic data of an employee b. Retrieve (from the Applicant's database) the previous work experience of the employee. c. Employee identification mark, fingerprints and signature d. Maintain record of all skills/ training and educational qualifications attained by an Employee before and during employment. e. Maintain language(s) proficiency of the employee. f. Maintain details as required of professional qualifications /memberships attained by employees. g. Maintain record (per employee) of career plan h. Hold a competence profile against each employee in the department. i. Match employee competencies to the requirements of a specified job/ position in the department. j. Maintain all necessary data for each employee as per requirement of the service book.	
5.4.1.126 In the system the dependents Data Action should include:	
5.4.1.127 Maintain Dependent's data (spouse(s) and children) for each employee as defined by users.	
5.4.1.128 In case of any change in the number of dependents, generate necessary transactions to effect the change in entitlements	

Description	Status (Yes/ No)
5.4.1.129 Follow-up employee's marital status and continuous eligibility of dependents	
5.4.1.130 The following employee actions should be facilitated, but not limited to these: a. New Appointment (from recruitment) b. Deputation in/ out c. Promotion d. Transfers e. Study, Annual Leave etc. f. Resignation g. Termination h. Dismissal i. Suspension j. Increment k. Punishments, memorandums, awards l. Service/ Salary Certificates m. Medical Scheme administration n. Education allowance administration o. Loan Applications p. Salary advance requests	
5.4.1.131 The employee related information once entered should be locked for future, however there should be a provision to allow modification for a specific period after profile creation.	
5.4.1.132 The system must have a provision to manage application from employee for indoor medical treatment.	
5.4.1.133 System must be able to generate permission letter using a pre-defined customizable template for issuance of advance for medical treatment.	
5.4.1.134 System must have a provision to manage medical bills for re-imburement.	
5.4.1.135 System must be able to share submitted documents with medical officer for expert opinion.	
5.4.1.136 System must be able to generate sanctions for re-imburement of medical bills after approval from designated officers.	

Description	Status (Yes/ No)
5.4.1.137 System must record all the medical treatments availed by the employee or its dependents.	
5.4.1.138 System should be able to track the expenditure incurred on all medical cases.	
The system workflow should generate and send emails to the concerned after the execution of above employee actions	
Contract Management, Monitoring & Control	
5.4.1.139 System should be able to define and maintain contracts for permanent / contract employees.	
5.4.1.140 System should be able to accept resignations from employees.	
5.4.1.141 The system must be able to generate summary reports and administrative alerts for employees whose contract/agreement is going to expire or they their retirement date is about to come.	
5.4.1.142 The system must be able to manage the extension/renewal of agreement for temporary employees.	
5.4.1.143 Provision to manage the deputation cases of employees.	
Leave Administration	
5.4.1.144 The system should have the facility to define and configure rules, procedures, workflow and policies for all kind of leaves based on grades. For example annual, sick (with pay, half-pay and without pay), Hajj, Maternity, etc	
5.4.1.145 The system should have the facility to maintain/enter date of resumption from leave to trigger future payments to the employee.	
5.4.1.146 The system should have the facility to accrue leave as of date.	
5.4.1.147 The system should have the facility to provide information regarding available leave as of any date.	
5.4.1.148 Ability to control absenteeism by establishing, communicating, and monitoring absence policies. This includes approval procedures and centralized or self-registration.	
5.4.1.149 Ability to implement and track profile-based clock in and clock out registrations for workers, enable workers to register work time for specific activities, and generate pay information that can be exported to a payroll system.	

Description	Status (Yes/ No)
5.4.1.150 Flexibility to not consider late for an employee on a particular date in case of special situations.	
5.4.1.151 Leave accruals and leave administration can be processed without Time and Attendance feature.	
5.4.1.152 Leave plans can be configured for a lump sum accrual on an annual basis.	
5.4.1.153 Leave plans can be configured to accrue based on length of service and user defined rates.	
5.4.1.154 Leave plans can be configured to accrue based on user-defined frequencies.	
5.4.1.155 Leave plans can be configured to adhere to user-defined carryover rules.	
5.4.1.156 System should support unlimited types of leave.	
5.4.1.157 Ability to track the approved date when the employee's leave of absence is expected to start and alert the relevant users on user defined rules.	
5.4.1.158 Ability to track the approved date when the employee is expected to return from the leave and alert the relevant users on user defined rules.	
5.4.1.159 Maintains of leave of absence history.	
5.4.1.160 Employees should be able to view Leave/leave plan balances.	
5.4.1.161 Employees should be able to request Leaves.	
5.4.1.162 Manager should be able to view Leave/leave plan balances.	
5.4.1.163 Managers should be able to view pending employee Leave/leave requests.	
5.4.1.164 Manager/departmental head should be able to approve leave.	
5.4.1.165 System must be able to constitute committee for certain leave approvals.	
5.4.1.166 Workflow approval processes must be included for Leave/leave requests initiated by employees or managers.	
5.4.1.167 System must have a provision to notify approved leaves to all stakeholders.	

Description	Status (Yes/ No)
5.4.1.168 System must have a provision to be linked with biometric devices for recording daily attendance.	
5.4.1.169 System must be able to calculate the amount to be paid against the leaves falling under leave encashment as per defined rule.	
5.4.1.170 System must have a provision to calculate leave encashment on monthly, yearly and based on service length.	
5.4.1.171 System must have a provision to break up the leave encashment amount in multiple installments.	
5.4.1.172 Ability to have multiple leave rules based on the state in which the employee works.	
5.4.1.173	
End of Service	
5.4.1.174 The system should be able to enroll all Employees in the Statutory Pension Scheme.	
5.4.1.175 The system should define and change Employee and Employer contributions towards Pension Scheme.	
5.4.1.176 The system should be able to generate Payroll transactions for automatic deduction of Employee's contribution to the Pension Scheme and produce a report of the deductions every month as defined in the sub head "Pension" in the Payroll Module.	
5.4.1.177 The system should be able to compute end of service benefits for employees based on grades.	
5.4.1.178 The system must be able to generate "No Demand Certificate" if nothing is outstanding against a specific employee.	
5.4.1.179 The system should be able to facilitate automatic generation of the Final Settlements for outgoing employees, including outstanding salaries, recovery of allowances (if any), outstanding overtime, outstanding leave and End of Service Benefits.	
Personnel Administration Data	
5.4.1.180 Residence contact address (residence telephone, pager, mobile phone,	
5.4.1.181 Work contact address (site, location, building, floor, room, extension, Dependent details	

Description	Status (Yes/ No)
5.4.1.182 The system should facilitate printing of all forms with contents pre-filled (as much as possible) based on the Information available in the Database.	
5.4.1.183 The system should provide Admin. with the employee up-to-date data details regarding work location, contact address, e.g. Telephone Directory.	
Disciplinary Actions & Grievance	
5.4.1.184 The system should facilitate the management of disciplinary and grievance cases including: a. Registration of new cases b. Follow-up & tracking c. Linkages with individual employee profiles	
5.4.1.185 System should support single/multiple levels of approval for handling disciplinary actions and grievances.	
5.4.1.186 System should provide the format for charge sheets.	
5.4.1.187 There must be a provision to receive complaints against an employee via the system.	
5.4.1.188 The system must have a provision to generate explanation, memorandum, show cause notice etc to specific employees.	
5.4.1.189 Provision to share the Show cause notice with stakeholders for publishing in newspaper and website.	
5.4.1.190 The system must be able to impose various penalties on an employee like suspension, dismissal from service, demotion, seizure of increments, restrictions from various system features etc.	
5.4.1.191 The system must be able to record court proceedings specific to an employee.	
Employee Self Service	
5.4.1.192 Self Service feature is required in the system, however the requirement would be that of standard B2E (Business to Employee) solution, where the portal users would be able to view any information prepared (and allowed to be viewed) by the HR department/any other department. This service would be required as read only template. However we had mentioned 100 portal users	

Description	Status (Yes/ No)
who would be able to retrieve standard forms and send any request, to be processed by the HR or other departments in keeping with IIU's routine work flow process.	
5.4.1.193 Self-service system in the form of a secure web page accessed using an Employee number/ active directory user and password is required.	
5.4.1.194 Access may be provided to data stored about the employee and for Employees to provide the company with information, including but not limited to: 5.4.1.195 Employee records – Read and selective update 5.4.1.196 Current and previous pay slip details – Read only 5.4.1.197 Commission / Incentive program – Read and selective update 5.4.1.198 Company and state benefits – Read only 5.4.1.199 Paid, Unpaid, Sick, Sabbatical and Compassionate leave agreed pending and history – Read only 5.4.1.200 Leave request messages – Input only 5.4.1.201 Messaging interface for employee notices including but not limited to: 5.4.1.202 Employees' suggestions, ideas, complaints etc. 5.4.1.203 Availability of training courses 5.4.1.204 Details of job vacancies 5.4.1.205 Access interface for managers and supervisors to view information from and send information to their sub-ordinates. This will facilitate notification / negotiation of: 5.4.1.206 Holiday requests and authorizations 5.4.1.207 Business and team goals 5.4.1.208 Integration with the e-mail server for e-mails notifications such payroll disbursement etc.	
5.4.1.209 The system must be able to generate various employee related reports based on various filters like department, domicile, qualification, scale, designation, seniority, appointment type, job status etc.	
5.4.1.210 IIU would be interested in any other aspects of employee interaction which may have proven beneficial in other projects	
5.4.1.211 Procurement, Inventory Control System and Self-Service Procurement	

Description	Status (Yes/ No)
5.5 Facilities Management	
5.5.1 System should be able to follow the rules and procedures as defined by IIU.	
5.5.2 System must support Ranking of approved supplier lists by item or commodity.	
5.5.3 Ability to associate supplier item numbers with in-house Sl. /part numbers.	
5.5.4 Ability to prevent purchases from un-approved supplier where applicable.	
5.5.5 The System should provide portal pagelets that allow easy access to key data from Human Resource Management applications. Each individual business user should be able to personalize the content for their pagelets easily.	
5.5.6 The System should provide portal pagelets that allow easy access to key data from Human Resource Management applications. Each individual business user should be able to personalize the content for their pagelets easily.	
5.5.7 System must help vendors operate more efficiently by enabling them to perform a variety of tasks online, such as updating profile data, requesting additional users, updating commodity and catalogue content, submitting invoices, reviewing payments, and more.	
5.5.8 There should be a vendor portal so that vendors can access to apply online for registration within system.	
5.5.9 Provision to allocate resources to registered vendors.	
5.5.10 Invoice generation for vendors as per allocated resources on Monthly, Annually or one time basis.	
5.5.11 Provision to define rates for automatic invoicing with annual increments and surcharge on late payments.	
5.5.12 Provision to record refundable securities and sanctions associated with vendors and projects.	
5.5.13 System must have the capability and framework for integration with common shipping carrier software for tracking of inventory.	
5.5.14 There must have facility to copy new purchase orders from existing ones.	

Description	Status (Yes/ No)
5.5.15 Establish a centralized buyer capability across your organization to support procurement policies and processes. Easily set up and maintain multiple purchasing policies and apply them to different sets of purchasers throughout the organization.	
5.5.16 Purchase Requisitions	
5.5.16.1 The system must be able to support manual or automatic purchase requisitions (PR) creation, as per user requirements, based on: a. Inventory replenishment recommendation b. Procurement Committee recommendation c. Requisitions by authorized employees	
5.5.16.2 The system must be able to have automatic purchase order (PO) generation from PR to eliminate duplicate data entry.	
5.5.16.3 The system must be able to tie PR number to PO and allow: a. PO search by PR number b. PR search by PO number	
5.5.16.4 The system must be able to supports requisition tracking and inquiry, and to alert Purchasing department on the PR's that should be reviewed and processed.	
5.5.16.5 The system must allow users to combine multiple PR's into one PO.	
5.5.16.6 Allow users to split one PR into multiple PO's or PO lines.	
5.5.16.7 Users must be able to input multiple comment lines and attached to the PR's and PO's.	
5.5.16.8 Ability to customize requisition summary screens to meet the user needs.	
5.5.16.9 The system must be enabled with distributing expenditures across multiple cost centers, projects or departments.	
5.5.16.10 Ability to create the account distributions automatically during requisition creation.	
5.5.16.11 System must be able to support attachment of notes, multimedia, etc.	
5.5.16.12 System must be enable enough so that self-service capabilities to empower employees to order day-to-day goods and services from searchable online catalogues.	
5.5.17 Quotations/Tenders	

Description	Status (Yes/ No)
5.5.17.1 Users must be able to generate request for quotation (RFQ)/RFP to be sent to vendors, published.	
5.5.17.2 The system must be able to track vendor response.	
5.5.17.3 The system must be able to support vendor quotation maintenance and inquiry.	
5.5.17.4 The system must be able to support multiple price breaks.	
5.5.17.5 Users should be able to attach standard text document (e.g. terms and conditions) on all RFQ's.	
5.5.17.6 Users must be able to create and update quotations based on vendor response.	
5.5.17.7 The system should alert users to review quotations that are going to expire in a certain time frame.	
5.5.17.8 The System must be flexible enough to evaluate vendors based on PPRA rules. System must be capable enough to perform Technical and Financial Evaluation of Business Partners based on predefined criterion.	
5.5.17.9 Purchase Order Creation & Maintenance	
5.5.17.10 The system must provide online PO maintenance and inquiry functions to add, change, delete and list PO.	
5.5.17.11 Users must be able to locate existing vendors through flexible search facility during PO creation, maintenance and inquiry: a. search by partial vendor code b. search by partial vendor name c. others (please specify)	
5.5.17.12 Once a purchase order is confirmed, any further changes to the PO will create a PO new revision. The system should provide a facility to track multiple revisions of the same PO.	
5.5.17.13 Re-approval is required whenever a new PO revision is created.	
5.5.17.14 The system must be able to control the approvals by amount, cost center, budget, account, item, category, and location.	
5.5.17.15 Users must be able to print only the PO lines changed in a particular PO revision.	
5.5.17.16 Users must be able to create the PO automatically from on-line requisition.	

Description	Status (Yes/ No)
5.5.17.17 System should support consolidate and centralize purchase requirements from multiple projects, cost centers or locations.	
5.5.17.18 The system must allow users to enter multiple items per PO.	
5.5.17.19 The system must allow users to enter multiple shipment delivery dates for a PO line.	
5.5.17.20 There should be facilities to inquiry all outstanding PO's items by: a. PO and PR number, PO number showing the status of PO b. Item/Part number and category c. Due Date, etc.	
5.5.17.21 The system must be able to support blanket order (that is, an agreement to buy certain items at a predefined price over a certain period).	
5.5.17.22 The system must have a facility to 'call off' against a blanket order with validation of the price, date, and purchase amount.	
5.5.17.23 Users must be able to assign primary/preferred vendor for each item.	
5.5.17.24 The users must be able to define multiple vendors per item/part.	
5.5.17.25 Users must be able to generate PO's in multiple currencies.	
5.5.17.26 Users must be able to generate PO for: a. direct item (stock item) b. indirect item c. spare part/consumable d. services e. others	
5.5.17.27 Users must have the option to include extra information or notes to be displayed/printed on PO when required.	
5.5.17.28 User must have the option to store standard notes relating to items and/or vendors to be displayed and/or printed on PO.	
5.5.17.29 Users must be able to define receiving quantity tolerances for each item/part.	
5.5.17.30 Users must be able to define receiving early/late tolerances for each item/part.	
5.5.17.31 The system must provide the option to prohibit it or issue a warning when a receipt violates such tolerances.	

Description	Status (Yes/ No)
5.5.17.32 The system must be able to track the purchase price history.	
5.5.17.33 Ability to customize the Purchase Order Summary screen to meet the users need.	
5.5.18 Receiving	
5.5.18.1 The system must provide on-line PO receipt transaction and automatic update of stock balance and PO status on receipt of items.	
5.5.18.2 The system should generate a full audit trail of all receipts to be posted to the GL.	
5.5.18.3 The system must provide automatic conversion of purchasing unit of measure to stock unit of measure.	
5.5.18.4 Users must be able to indicate goods under inspection and not available for production.	
5.5.18.5 Ability to receive unordered items and later match them to Purchase order.	
5.5.18.6 Ability to keep track of lot and serial number during receiving.	
5.5.18.7 The system must support substitute items.	
5.5.18.8 There must be a facility to handle material rejects after inspection and reflect on the PO as outstanding quantity.	
5.5.18.9 Ability to view expected receipts by promised date and the viewing of complete receiving history.	
5.5.19 Import Purchases	
5.5.19.1 Calculation of assessable value as per standard format provided by Custom Authorities.	
5.5.19.2 Duties and taxes recording and calculation on assessable value basis or ITP value.	
5.5.19.3 Recording and calculation of sales tax on import, calculation on the basis of assessable vale plus custom duty. Third party liability in case of sales tax on import.	
5.5.19.4 Recording of vendor liability on risk and reward transfer.	
5.5.19.5 Calculation of estimated landed cost on the basis of estimated charges percentages.	

Description	Status (Yes/ No)
5.5.19.6 Vendor Analysis and Performance Measurement	
5.5.19.7 The system must maintain a detailed history of each vendor's performance and provide comprehensive analysis based on: a. quality b. delivery quantity c. delivery time d. price	
5.5.20 Requisition Processing	
5.5.20.1 Provide a single source for employees across the enterprise to order products.	
5.5.20.2 Use the Catalogue Browser to find the right item quickly.	
5.5.20.3 Compare products side by side to select the right one for you.	
5.5.20.4 Enter a special request for unique or one-time purchases.	
5.5.20.5 Request items from inventory locations and query inventory levels before submitting the request.	
5.5.20.6 Use powerful express forms to gather complete details related to complex requests.	
5.5.20.7 Maintain, group, and share favorite item lists by requester.	
5.5.20.8 Specify delivery to multiple locations and delivery schedules for each line item, multiple accounting charges per delivery, and one-time shipping locations.	
5.5.20.9 Requesters to select, compare, and order items and services from role-based online catalogs that are tailored to their role in the organization.	
5.5.20.10 Use of synonyms, match case, and Boolean logic to find items easily that meet requesters' criteria.	
5.5.20.11 Parametric search of attributes that are registered to a category needed during the approval process.	
5.5.20.12 Configure workflow approvals based on criteria appropriate to the organization.	
5.5.20.13 Receive notification of approvals through email, a work list item on the portal, or wireless device, and perform approvals while out of the office using a wireless device.	

Description	Status (Yes/ No)
5.5.20.14 Use serial and parallel approval paths or add approvers, reviewers, or both, as needed during the approval process.	
5.5.20.15 Authorize line item approval and re-approval for multiple line requests.	
5.5.20.16 View full details about requests, including detailed product information, cost distributions, attachments, and requester comments.	
5.5.20.17 Edit requests during the approval process	
5.5.21 Inventory Control System	
5.5.21.1 The system must be able to configure and store Item/Product Profile, Product General Info, Suppliers, Units and Locations	
5.5.21.2 The system must be able to manage and record Inventory Transactions, Item Listings, Manual/automatic Transactions, Transfer & Adjustments, Inventory in/out, Goods Receipt Notes, and Item issuance note/ requisition	
5.5.21.3 The system must be able to search items by various parameters like category, location, item description, serial number and types.	
5.5.21.4 The system must be able to manage inspection of returned goods and record the inspection report.	
5.5.21.5 The system must be able to manage Inventory Transfer & Inventory Adjustments	
5.5.21.6 There must be a provision to send Intimation letter to party for returned products.	
5.5.21.7 The system must be able to manage Inventory rejections.	
5.5.21.8 The system must be able to manage repaired items.	
5.5.21.9 There must be a provision to record the expenditure incurred on the maintenance of an item and the details of vendor for the repair.	
5.5.21.10 There must be an option to attach the inquiry or any other inspection report with the inventory.	
5.5.21.11 The system must be able to manage unusable items.	
5.5.21.12 There must be a provision to auction unusable/old inventory.	
5.5.21.13 The system must support Basic lookup reports and should have following reports as well for Item listings, Activity based analysis	

Description	Status (Yes/ No)
[items in/out], Inventory in-hand, Stock register, Suppliers/vendors, Purchase requisitions, Purchase orders and Rejections.	
5.5.22 System shall be designed to know what type of assets (moveable and immovable) is possessed by IIUI.	
5.5.23 System shall be designed to know about all moveable assets like office equipment, laboratory equipment, office machinery, electrical installations and vehicles deployed in university.	
5.5.24 System shall know about all immovable assets like lands, buildings, roads, sheds, etc with their present condition, maintenance requirements, annual ground rent payments, lease managements etc.	
5.5.25 System should track the financial, contractual, and inventory details of hardware throughout their lifecycles	
5.5.26 Record and execute all preventive and corrective maintenance activities on deployed assets and perform regular audits, right up until asset retirement.	
5.5.27 Automate asset lifecycle corrective maintenance work orders and other processes to minimize wasted resources and eliminate repetitive tasks.	
5.5.28 System should enforce asset policies and facilities to help meet regulatory compliance requirements.	
5.5.29 Queries and Reports	
5.5.29.1 System must be able to: a. Monitor project as per user defined variable including but not restricted to, university, scholarships, professors, events, grants, research, publications etc. a) Define access privileges by Database Administrator user.	
5.5.29.2 System must be able to provide customized reports as required by each project and to review summary reports and then drill down to more detailed reports and then to detailed transactions or activities.	
5.5.29.3 System shall provide inquiry features to users to view information.	
5.5.29.4 Ability to export data in on-line queries to desktop spreadsheet and reporting tools.	
5.5.29.5 User must be able to track and make inquiries on project status, including: but not restricted to budget, expenditure, revenue,	

Description	Status (Yes/ No)
universities, scholars, professors, events, completion date with actual target, placements, achievements etc. as required by each project.	
5.5.29.6 The System shall be able to report and maintain accounting records at the transaction level in more than one currency.	
5.5.29.7 The System shall provide the enterprise-wide project information and enable user to perform multidimensional analysis of project information across projects and organizations.	
5.5.29.8 System must be able to show the respective accounting transactions.	
5.5.29.9 Ability to generate cash forecast by project basis.	
5.5.29.10 System shall be capable to generate asset lifecycle end user required reports.	
Transport Management	
5.5.29.11 The system must be able to manage vehicles based on their category.	
5.5.29.12 There must be a provision to manage and record routine and special routes.	
5.5.29.13 The system must be able to manage and associate drivers with a vehicle or route.	
5.5.29.14 The system should also support the management of operational, repair and maintenance cost of vehicles.	
5.5.29.15 There should be a provision to manage vehicle parts / lubricants, tools & equipment, transit store etc.	
5.5.29.16 The system should be able to record inquiry reports of accidents.	
5.5.29.17 There must be a provision to record vehicle purchase and registration history.	
5.5.29.18 Facility to record the vehicle utilization and running history.	
5.5.29.19 Ability to procure and record vehicle parts in the system.	
5.5.29.20 Provision to issue available parts for utilization in system and record unserviceable or replaced parts.	
5.5.29.21 There must be a provision to auction vehicle or parts.	

Description	Status (Yes/ No)
5.5.29.22 The solution must provide the dashboard for personnel of Transport Section for self-service support according to their role & permission.	
5.6 Campus Analytics/Business Intelligence (BI)	
5.6.1.1 The Proposed system must be integrated with comprehensive business intelligence system to support better business decision-making. BI provide historical, current, predictive views and integrated and separated dashboard of all modules/departments. Proposed BI should have features below:	
5.6.1.2 Facility of data warehousing and data cubes based on analytical engine comprises of Metadata Engine, Query Engine, Job Engine and Scheduler, Storage Engine/Redis, REST Server, ETL, Monitoring and Alerting engine to run entire stack of BI on internal database as well as external SQL and NOSQL databases.	
5.6.1.3 Facility to build cube from the identified tables/datasets across different data sources.	
5.6.1.4 Facility to already defined KPIs and ability to create new KPI for comparing benchmark values verses actual outcomes	
5.6.1.5 Facility to view dashboards for each functional area for the line management and top management such as President, Rector, Voice Presidents, Deans and Directors, Section heads etc. to monitor the performance	
5.6.1.6 Ability to create and share dashboards	
5.6.1.7 Support easy-to-use interface for exploring and visualizing data	
5.6.1.8 Support easy to use mapping of cube with rich set of dashboard widgets including GIS and map widget	
5.6.1.9 Ability to define multi-dimensional model and pre-calculate the cube in proposed BI system.	
5.6.1.10 Ability to allow users to control how data sources are displayed in the UI by defining which fields of datasets should show up in which drop-down and which aggregation and function metrics are made available to the user	
5.6.1.11 Facility to filter information based on criteria such as campuses, faculty, departments, sections, functional areas, etc	

Description	Status (Yes/ No)
5.6.1.12 Facility to drilldown to navigate from dashboard to supporting reports	
5.6.1.13 Facility to generate graphical and statistical reports such as charts, gauge, etc.	
5.6.1.14 Facility to generate alerts and view tickers in case of any exceptions in achieving KPIs	
5.6.1.15 Facility too view dashboard on mobiles, tablets, etc. for Android and IOS	
5.6.1.16 Facility for the user to create custom report by their own based on the data cubes developed in the data warehouse	
5.6.1.17 Facility to drag and drop data fields to create a report	
5.6.1.18 Support authentication with integration with major authentication providers (database, OpenID, LDAP, SAML & OAuth)	
5.6.1.19 Support extensible, high-granularity security/permission model allowing intricate rules on who can access individual features and the dataset	

6. PART F: CMS IMPLEMENTATION COST

This part is to be completed by the Respondent and submitted to the IIUI as part of the financial proposal for 32,000 students and 4,000 employees. To get an estimate of software cost required for module users, bidders should consider the requirements mentioned in this RFP. The bidder should quote the prices in PKR with educational discounts. The financial proposal should include all costs to be incurred by IIU for the project in PKR. The quoted price should be inclusive of all applicable taxes of Government of Pakistan and any other expenses as no price variation will be accepted after bid opening. Supplier will be responsible for the delivery, installation, commissioning and professional training. Following terms and conditions should be considered before filling the financial templates.

- Advance could be paid as per contract award agreement up to 15% of bid value to vendor upfront against the submission of Bank Guarantee. The Bank Guarantee shall remain valid till full solution launch and support period.
- The successful bidder shall furnish the performance guarantee in shape of Bank Guarantee equivalent to 10% of the value of Contract Price within 14 days of the issuance of Letter of Acceptance. The Contract shall be signed after receipt of acceptable Performance Guarantee. The performance guarantee shall be valid for the whole duration of project implementation.
- All payments shall be made through cross cheque in the Pakistan Rupees (PKR).
- Taxes will be deducted at source as per law and government rules in vogue at the time of payment.

6.1 CMS Implementation Cost

The following template should be used to provide implementation cost for the modules of CMS. All prices should be mentioned in the templates defined in this section. Prices quoted without template would not be accepted.

A: Student Life Cycle Implementation Cost							
S#	Description	Module + Implementation + Training + Support warranty period (millions)	Annual Support Charges after warranty period	Any Other Cost (millions)	Total Price (millions Without Tax)	Tax (In millions)	Total Price (millions Including Tax)
		(A)	(B)	(C)	D = A+B+C	(E)	F = D+E
1	Online Admission System						
2	Academic Structure						
3	Registration						
4	Course Structure						
5	Student Record						
6	Gradebook						
7	Class Scheduling						
8	Accommodation Management						
9	Calendar Management						
10	Alumni Management & Fund Raising						
11	LMS, Koha Integration & Web RTC base conferencing						
A – Sub Total (PKR):							
B: Finance, Financial Aid & HR/Workload (CMS Allied Departments)							
12	Financials						
13	Student Finance						
14	Financial Aid						

15	HR/Workload Management							
16	Facilities Management							
17	Campus Analytics/Business Intelligence (BI)							
B – Sub Total (PKR):								

6.2 Customization Cost

The following template C should be used to provide additional costs with respect to customization and future enhancements after warranty period as mentioned below:

C: CMS Customization Cost		
S. No	Description	Per Man Day (In Thousands)
1	Price of customization and future enhancements after warranty period	

6.3 Total Cost for CMS

This section should reflect the total cost incurred on the implementation of CMS.

$$\text{Total Bid Cost} = A + B$$

7. PART G: DELIVERABLES, IMPLEMENTATION & PAYMENTS PLAN

This section should be used to propose the main activities of the assignment, their content and duration, phasing and interrelations, milestones, and delivery dates of the reports and deliverables.

The proposed work plan should be consistent with the technical approach and methodology, showing understanding of the TOR and ability to translate them into a feasible working plan. A list of the final documents, including reports/manuals to be delivered as final output, should be included here.

The above should be substantiated with the project plan, as per the following template

S#	Activity Description	Timelines (In Months & to be provided by Vendor)	Extent/Liaison	Payment Plan
1	Project charter, Project Schedule, WBS, Initiation of As-Is Analysis and Business process re-engineering		All Academic & Administrative Sections	20%
2	Submission of Gap analysis, As-IS, To-Be and System Requirement Specification (SRS) document		IT Center & CMS Implementation Committee	
3	Vetting of SRS by the University		All Academic & Administrative Sections	
4	Software Installation on server & Configuration of Student Life Cycle Module		IT Center	10
5	Software Installation on server & Configuration of Finance, Financial Aid & HR/Workload Module		IT Center	
	Customization of STUDENT LIFE CYCLE			
6	Online Admission System		Admission & IT section	10%
	Academic Structure		Academics Department, Faculties & Institutes	
	Registration		Academics Section	
	Course Structure		Academics Department, Faculties & Institutes	
	Student Record		Academics Section	
	Gradebook		Examination Section & Faculties	
	Class Scheduling		Faculties	

	Calendar Management		Director Academics, Student Advisor Office & Faculties	
	Alumni Management & Fund Raising		Alumni, Academics & Finance Section	
	Accommodation Management			
	LMS, Koha Integration & Web RTC base conferencing		All Faculties, Library, Academics & IT Section	
7	User acceptance Testing		All stakeholders for Student Life Cycle	10%
Customization of FINANCE, FINANCIAL AID & HR/WORKLOAD				
8	Financials		Finance Section	10%
	Student Finance		Academics, Fee & Finance	
	Financial Aid		Finance Section	
	HR/Workload Management		HR Section	
	Facilities Management		Purchase & Store Section, Transport Section	
	BI		Academic & Administration	
9	User acceptance Testing		All stakeholders for Finance, Financial Aid & HR	10%
10	End user & professional trainings, End User & Technical manuals and Project Source code delivery		All stakeholders	10%
11	Support Completion			20%

In addition to the actual deployment/ implementation of the CMS solution at IIU, the detailed Project Governance including a project plan for the project execution is also required in the start of this project.

8. TERMS & CONDITIONS

8.1 General Terms and Conditions

- 8.1.1 The IIUI reserves the right to reject all bids or proposals at any time prior to the acceptance of bid or proposal according to Rule 33 of the Public Procurement Rules, 2004 (PPR).
- 8.1.2 Validity period of the bids shall be 4 months (120 days). Extension, if any in the bid validity shall be subject to Rule 26, PPR.
- 8.1.3 IIUI is requesting for complete solution according to this RFP. Incomplete proposals / solutions shall be rejected.
- 8.1.4 Clarification of bids / proposals, if required shall be sought according to Rule 31, PPR.
- 8.1.5 If there is a discrepancy between unit price and total price in the submitted bid which is obtained by multiplying the unit price and quantity, the unit price shall prevail and total price shall be corrected. If there is a discrepancy between the words and figures, the amount in words shall prevail. If there is a mistake in addition/totaling, that shall be corrected. If the bidder does not accept the corrected amount of bid, his bid shall be rejected and his bid security forfeited.
- 8.1.6 Conditional Bids will not be entertained.
- 8.1.7 The clarifications, if any shall be sought in writing by a prospective bidder at least 10 days prior to the bid opening so that the response/information could be provided to all prospective bidders at least 5 days prior to bid submission deadline.
- 8.1.8 In case of any dispute between the two parties of any matter arising out after signing the Contract, the efforts shall first be made for amicable settlement according to prevailing rules of reconciliation. In case the matter is not resolved amicably, it shall be settled by arbitration. The President, IIUI shall appoint an impartial arbitrator to carry out the arbitration under the Arbitration Act, 1940 and announce an award within four months. The cost of arbitration shall be borne by both the parties equally.
- 8.1.9 Only sealed bids shall be accepted in a manner prescribed by this RFP.
- 8.1.10 The Bidders shall indemnify IIUI against all 3rd party claims of infringement of copyright, patent, trademark, industrial design rights arising from use of the goods of any part thereof in Pakistan.
- 8.1.11 The time shall be the essence of the Contract. In the event of any delay the firm shall inform IIUI before expiry of completion period giving reasons / justification for delay. The request shall be evaluated at its merit for extension in completion period and may consider extension or otherwise.
- 8.1.12 In case of late completion for the services due to reasons well within control of the firm, liquidated damages at the rate of 2% per month of the delayed activities services shall be levied up to 10% of the total value of the undelivered services.

- 8.1.13 In case of inordinate delay without any cogent reason, or in case of unsatisfactory services, the Contract shall be cancelled and the Performance Guarantee shall be encashed. The firm may also be blacklisted.
- 8.1.14 The successful Firm(s) shall be bound to provide all Technical/User documentation and training at the time of completion of services.
- 8.1.15 The specifications provided in this RFP are the minimum requirements of IIUI. The vendors must meet or may exceed these specifications to meet the actual requirements of this Project and its successful practical implementation. But in such a case additionally proposed or altered specifications must clearly be highlighted to enable IIUI to clearly identify modified specifications.
- 8.1.16 Supplier will guarantee troubleshooting and post implementation support from the date of inspection and deployment of Software.
- 8.1.17 The firm would provide details of any improvements / modifications in provided solution during warranty/support period/currency of the contract, if carried out by the Software Developer/ Supplier.
- 8.1.18 Firms must submit earnest money equal 3% of bid price with their technical bid, which shall be opened first. It should be in the form of bid pay order / bank draft in favour of International Islamic University, Islamabad. Failure to provide earnest money along with Technical Submittal shall result in rejection of bid. The amount submitted as Earnest Money shall be refunded to the unsuccessful bidders after bid validity is over or after the decision of "Tender Committee" for the award of said tender whichever is earlier.
- 8.1.19 The earnest money of the successful bidder will be returned after providing an irrevocable Performance Guarantee equivalent to 10% of the contract cost from a scheduled bank or an Insurance Company of at least AA+ rating.
- 8.1.20 The IIUI Inspection Committee will inspect and test the deployed solution as per specifications. The completed work will be verified as per IIUI standards. Salient features are as follows:
- a) Complete Documentation and Labelling.
 - b) Registration of IIUI as user and customer against all procured items with the manufacturer (where applicable).
 - c) Conduct and ensure quality training-if required.
 - d) Companion Software, Latest stable Operating System (where applicable).
 - e) The bidders must meet IIUI software requirement specification or equivalent.
 - f) In case of branded software, there must be a provision to upgrade.
 - g) Firms are to ensure that "End of Sale" and "End of Life" has not been declared against quoted items.
- 8.1.21 If the firm fails to effect or keep in force any of the insurances referred to in the contract or fails to provide satisfactory work / progress, the IIUI may, without prejudice to any other right or remedy, terminate the Contract and proceed for encashment of Performance Guarantee.
- 8.1.22 Failure of the successful bidder to agree with the Contract Agreement and Terms & Conditions of the RFP shall constitute sufficient grounds for the annulment of the award of contract and forfeiture

of the bid security, in which event the IIUI may award the contract to the next best value bidder or call for new proposals from the interested bidders.

- 8.1.23 Bidder will provide read-only access by IIU project manager to its development portal to track the project timelines.

8.2 Prohibited Practices

- 8.2.1 The Applicants/Bidders and their respective officers, employees, agents and advisers shall observe the highest standard of ethics during the Selection Process. Notwithstanding anything to the contrary contained in this RFP, the IIUI shall reject a Proposal without being liable in any manner whatsoever to the Applicant/Bidder, if it determines that the Applicant/Bidder has, directly or indirectly or through an agent, engaged in corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice (collectively the “Prohibited Practices”) in the Selection Process. In such an event, the IIUI shall, without prejudice to its any other rights or remedies, forfeit and appropriate the EMD (Earnest money deposit) or PBG (Performance bank guarantee), as the case may be, as mutually agreed genuine pre-estimated compensation and damages payable to the IIUI for, inter alia, time, cost and effort of the IIUI, in regard to the RFP, including consideration and evaluation of such Applicant’s Proposal.
- 8.2.2 Without prejudice to the rights of the IIUI under Clause above and the rights and remedies which the IIUI may have under the LOI (Letter of intent) or the Agreement, if a bidder, as the case may be, is found by the IIUI to have directly or indirectly or through an agent, engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice during the Selection Process, or after the issue of the LOI or the execution of the Agreement, such Bidders shall not be eligible to participate in any tender or RFP issued by the IIUI during a period of 24 months from the date such Applicant or Prime Bidder, as the case may be, is found by the IIUI to have directly or through an agent, engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice, as the case may be.
- 8.2.3 For the purposes of this Section, the following terms shall have the meaning hereinafter respectively assigned to them:
- 8.2.3.1 “Corrupt practice” means the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence the action of any person connected with the Selection Process (for avoidance of doubt, offering of employment to or employing or engaging in any manner whatsoever, directly or indirectly, any official of the IIUI who is or has been associated in any manner, directly or indirectly with the Selection Process or the LOI or has dealt with matters concerning the Agreement or arising therefrom, before or after the execution thereof, at any time prior to the expiry of one year from the date such person/official resigns or retires from or otherwise ceases to be in the service of the IIUI, shall be deemed to constitute influencing the actions of a person connected with the Selection Process); or (ii) save as provided herein, engaging in any manner whatsoever, whether during the Selection Process or after the issue of the LOA or after the execution of the Agreement, as the case may be, any person in respect of any matter relating

to the Project or the Award or the Agreement, who at any time has been or is a legal, financial or technical consultant/ adviser of the IIUI relation to any matter concerning the Project;

8.2.3.2 “fraudulent practice” means a misrepresentation or omission of facts or disclosure of incomplete facts, in order to influence the Selection Process;

8.2.3.3 “coercive practice” means impairing or harming or threatening to impair or harm, directly or indirectly, any persons or property to influence any person’s participation or action in the Selection Process;

8.2.3.4 “undesirable practice” means (i) establishing contact with any person connected with or employed or engaged by the IIUI with the objective of canvassing, lobbying or in any manner influencing or attempting to influence the Selection Process; or (ii) having a Conflict of Interest; and

8.2.3.5 “restrictive practice” means forming a cartel or arriving at any understanding or arrangement among Applicants with the objective of restricting or manipulating a full and fair competition in the Selection Process.

8.3 Contract General Terms and Conditions

Inspections and Tests

The Purchaser or its representative shall have the right to inspect and/or to test the Software to confirm their conformity to the Contract specifications at no extra cost to the Purchaser.

The inspections and tests may be conducted on the premises of the Supplier (Developer) and/or at the final destination. If conducted on the premises of the Supplier, all reasonable facilities and assistance, including access to drawings and production data, shall be furnished to the inspectors at no charge to the Purchaser.

Delivery

Delivery of the Goods/Services shall be made by the Supplier according to project deliverable and set deadline made by IIUI after award of the contract.

Warranty

Limited Media Warranty. The Bidder warrants that, for a period of 2 years following delivery of the Software, the media upon which the Software is delivered will be free from defects in materials and workmanship under normal use.

The Developer's sole obligation in this regard will be to provide the purchaser with a performing copy of the Software without costs to the purchaser within a reasonable time (within one month) following the purchaser written notice to the Developer of the defect.

Limited Support Warranty. For a period of two (02) years following the deployment of the Software, the Developer shall perform its maintenance and support services consistent with generally accepted industry standards, but only if the Software is installed and operated in accordance with the Developer's documentation and other instructions.

Limited Performance Warranty. The Developer warrants that, for a period of two (02) years starting on the date of deployment of the Software, the Software will perform

substantially in accordance with the functional specifications set forth in the documentation, but only if the Software is installed and operated in accordance with the Developer's documentation and other instructions.

If the Supplier, having been notified, fails to remedy the defect(s) within the specified period, the Purchaser may proceed to take such remedial action as may be necessary, at the Supplier's risk and expense and without prejudice to any other rights which the Purchaser may have against the Supplier under the Contract.

Payment

The Supplier's request(s) for payment shall be made to the Purchaser in writing, accompanied by an invoice describing, as appropriate, the Goods delivered and Services performed, and by documents submitted.

Delays in the Supplier's Performance

Delivery of the Goods and performance of Services (modules/software/training/documentation etc.) shall be made by the Supplier in accordance with the time schedule prescribed by the Purchaser.

If at any time during performance of the Contract, the Supplier encounters conditions impeding timely delivery of the Goods and performance of Services (modules/software/training/documentation/Source code etc.), the Supplier shall promptly notify the Purchaser in writing of the fact of the delay, its likely duration and its cause(s). As soon as practicable after receipt of the Supplier's notice, the Purchaser shall evaluate the situation and may at its discretion extend the Supplier's time for performance, with or without liquidated damages, in which case the extension shall be ratified by the parties by amendment of Contract.

A delay by the Supplier in the performance of its delivery (implementation and deployment) obligations shall render the Supplier liable to the imposition of liquidated damages, unless an extension of time is agreed upon without the application of liquidated damages.

Liquidated Damages

If the Supplier fails to deliver any or all of the Goods or to perform the Services (modules/software/training/documentation etc.) within the period(s) specified in the Contract, the Purchaser shall, without prejudice to its other remedies under the Contract, deduct from the Contract Price, as liquidated damages, 0.5% of the total amount of the Contract per week, up to a maximum of 10% of the total amount of contract. Once the maximum is reached, the Purchaser may consider termination of the Contract.

Termination for Default

The Purchaser, without prejudice to any other remedy for breach of Contract, by written notice of default sent to the Supplier, may terminate this Contract in whole or in part:

- (a) if the Supplier fails to deliver any or all of the Goods or Services (modules/software/training/documentation etc.) within the period(s) specified in the Contract, or within any extension thereof granted by the Purchaser; or
- (b) if the Supplier fails to perform any other obligation(s) under the Contract.
- (c) if the Supplier, in the judgment of the Purchaser, has engaged in corrupt or fraudulent practices in competing for or in executing the Contract.

For the purpose of this clause:

“corrupt practice” means the offering, giving, receiving, or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution.

“fraudulent practice” means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Purchaser, and includes collusive practice among Bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the Purchaser of the benefits of free and open competition.

In the event the Purchaser terminates the Contract in whole or in part, the Purchaser may procure, upon such terms and in such manner as it deems appropriate, Goods or Services similar to those undelivered, and the Supplier shall be liable to the Purchaser for any excess costs for such similar Goods or Services. However, the Supplier shall continue performance of the Contract to the extent not terminated.

Force Majeure

The Supplier shall not be liable for forfeiture of its performance security, liquidated damages, or termination for default if and to the extent that its delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.

For purposes of this clause, “Force Majeure” means an event beyond the control of the Supplier and not involving the Supplier’s fault or negligence and not foreseeable. Such events may include, but are not restricted to, wars or revolutions, fires, floods, epidemics, quarantine restrictions, and freight embargoes.

If a Force Majeure situation arises, the Supplier shall promptly notify the Purchaser in writing of such condition and the cause thereof. Unless otherwise directed by the Purchaser in writing, the Supplier shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

Termination for Insolvency

The Purchaser may at any time terminate the Contract by giving written notice to the Supplier if the Supplier becomes bankrupt or otherwise insolvent. In this event, termination will be without compensation to the Supplier, provided that such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to the Purchaser.

Termination for Convenience

The Purchaser, by written notice sent to the Supplier, may terminate the Contract, in whole or in part, at any time for its convenience. The notice of termination shall specify that termination is for the Purchaser's convenience, the extent to which performance of the Supplier under the Contract is terminated, and the date upon which such termination becomes effective.

The Goods or Services (modules/software/training/documentation/source code etc.) that are complete and ready for shipment within fifteen (15) days after the Supplier's receipt of notice of termination shall be accepted by the Purchaser at the Contract terms and prices.

For the remaining Goods and services (modules/software/training/documentation etc.), the Purchaser may elect:

- a. to have any portion completed and delivered at the Contract terms and prices; and/or
- b. to cancel the remainder and pay to the Supplier an agreed amount for partially completed Goods and Services (modules/software/training/documentation etc.) and for materials and parts previously procured by the Supplier.

Settlement of Disputes

If any dispute or difference of any kind whatsoever shall arise between the Purchaser and the Supplier in connection with or arising out of the Contract, the parties shall make every effort to resolve amicably such dispute or difference by mutual consultation.

If, after thirty (30) days, the parties have failed to resolve their dispute or difference by such mutual consultation, then either the Purchaser or the Supplier may give notice to the other party of its intention to commence arbitration, as hereinafter provided, as to the matter in dispute, and no arbitration in respect of this matter may be commenced unless such notice is given.

Any dispute or difference in respect of which a notice of intention to commence arbitration has been given in accordance with this Clause shall be finally settled by arbitration. Arbitration may be commenced prior to or after delivery of the Goods or Services under the Contract.

Arbitration proceedings shall be conducted in accordance with the rules. Notwithstanding any reference to arbitration herein,

- a. the parties shall continue to perform their respective obligations under the Contract unless they otherwise agree; and
- b. the Purchaser shall pay the Supplier any dues.

Limitation of Liability

Except in cases of criminal negligence or willful misconduct, and in the case of infringement,

- a. the Supplier shall not be liable to the Purchaser, whether in contract, tort, or otherwise, for any indirect or consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, provided that this exclusion shall not apply to any obligation of the Supplier to pay liquidated damages to the Purchaser and
- b. the aggregate liability of the Supplier to the Purchaser, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price, provided that this limitation shall not apply to the cost of repairing or replacing defective goods.